



**Maternal and Child Health Services  
Title V Block Grant**

**State Narrative for  
Puerto Rico**

**Application for 2010  
Annual Report for 2008**



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## **I. General Requirements**

### **A. Letter of Transmittal**

The Letter of Transmittal is to be provided as an attachment to this section.

***An attachment is included in this section.***

### **B. Face Sheet**

The Face Sheet (Form SF424) is submitted when it is submitted electronically in HRSA EHB. No hard copy is sent.

### **C. Assurances and Certifications**

By signing the SF424 Form and submitting the Title V Block Grant (BG) Application for 2005-2006, the Puerto Rico Department of Health (PRDoH) is committed to comply with all requirements established by OBRA'89 (PL 104-193, 1996). Funds allotted to PR will only be used for addressing the identified needs of women in their reproductive age, their infants, children and adolescents, including those with special needs and their families; and for the proper management and implementation of the action plan as described in the application. The allotted funds will be fairly distributed across all geographical areas for the different MCH population groups in accordance to the mandate (30-30-10).

Under any circumstance the Title V Block Grant funds will be used for construction or the purchase of land.

We will comply with all applicable requirements of other federal laws, executive orders, regulations and policies governing this program.

The undersigned agrees that the PRDoH will comply with the Public Health Service terms and conditions if the grant is awarded as a result of the submitted application.

Additionally, we certify that services will be rendered in a smoke-free environment, to provide a drug-free workplace in accordance with 45 CFR Part 76, and to comply with the prohibition of using federal funds to support any activity regarding lobbying or its appearance to.

/2007/ By signing the SF424 Form and submitting the Title V Block Grant Application for FY 2006-2007, the Puerto Rico Department of Health reiterates all its commitments stated above.//2007//

/2008/ By signing the SF424 Form and submitting the Title V Block Grant Application for FY 2007-2008, the Puerto Rico Department of Health reiterates all the commitments stated above.//2008//

/2009/ By signing the SF424 Form and submitting the Title V Block Grant Application for FY 2008-2009, the Puerto Rico Department of Health reiterates all the commitments stated above.//2009//

***/2010/ By signing the SF424 Form and submitting the Title V Block Grant Application for FY 2009-2010, the Puerto Rico Department of Health reaffirms all the commitments stated above.//2010//***

***An attachment is included in this section.***

### **D. Table of Contents**

This report follows the outline of the Table of Contents provided in the "GUIDANCE AND FORMS FOR THE TITLE V APPLICATION/ANNUAL REPORT," OMB NO: 0915-0172; published March 2009; expires March 31, 2012.

## **E. Public Input**

/2007/ Public input was obtained from a wide array of stakeholders including, but not limited to, women of child bearing age, adolescents, front line providers (home visiting nurses and community health workers), regional MCH staff, OB and other perinatal providers, pediatricians, collaborators from other agencies and programs serving the MCH population, professional organizations, members of the Healthy Start Consortium (also the MCH Advisory Body), Regional SSDI Inter agency Working Groups, etc., on a regular and ongoing basis. An ad was published on June 9-11, 2006 in two newspapers of wide circulation, "El Nuevo Día" and "El Vocero", requesting input from the concerned general public. Persons interested in reviewing and submitting recommendations could review a copy of the application and the Needs Assessment in Aguadilla, Bayamón, Caguas, Ponce and San Juan on June 12-13, 2006. Written recommendations were due June 20, 2006. This year a notice was posted in the PRDoH web page from June 1-13, 2006.

No one requested to review the proposal. The notice posted on the DoH web page was read by 372 persons.//2007//

/2008/ Public input was also obtained from a wide array of stakeholders including, but not limited to, women of child bearing age, adolescents, front line providers (home visiting nurses and community health workers), regional MCH staff, OB and other perinatal providers, neonatologists, pediatricians, neonatal and materno-fetal nurses, infant and maternal mortality committee members, and positive youth development model committee members, collaborators from other agencies and programs serving the MCH population, professional organizations, members of the Healthy Start Consortium and Regional SSDI Interagency Working Groups, on a regular and ongoing basis. Other important public input is feedback from HVP participant committee, Youth from the Positive Youth Development Committee. An ad was published on June 15, 16, 17 and 18, 2007 in three newspapers of wide circulation, "El Nuevo Día", "El Vocero" and "Primera Hora", requesting input from the concerned general public. Persons interested in reviewing and submitting recommendations could review a copy of the application and the Needs Assessment in Aguadilla, Bayamón, Caguas, Ponce and San Juan on June 21-22, 2007. Written recommendations were due June 27, 2007.

The proposal was reviewed by the Office of the Commissioner of Insurance and a Pediatric Nephrologist from University of Puerto Rico, Medical Science Campus. Their recommendations were integrated to our block grant proposal.//2008//

/2009/ An ad was published June 6-7, 2008 in 2 newspapers requesting public input. Three persons reviewed the proposal and two submitted written recommendations. A notice was also posted in the DoH web page in June. This page receives 1,260 hits per month.

The Leadership Workshop on EPSDT and Title V Collaboration provided stakeholders the opportunity to analyze the health care system and the MCH health status. Afterwards they offered input on their priority work areas which were: reviewing EPSDT guidelines, uniform use of the ASQ tool and supporting PCP implementing a Medical Home. Additional input was obtained from RWG, Consortia, and Committees.//2009//

***/2010/ An ad was published in May 29-30, 2009 in two newspapers of wide circulation across the Island, to request general public input. The copies were available for review and recommendations in the MCH offices at San Juan, Bayamón, Aguadilla-Mayagüez and Caguas on June 3-4, 2009. Three persons called to inquire about the proposal. The***

***Director of the Camuy municipal Citizens Affairs Office reviewed the document. No recommendations were submitted.//2010//***

## II. Needs Assessment

In application year 2010, it is recommended that only Section IIC be provided outlining updates to the Needs Assessment if any updates occurred.

***An attachment is included in this section.***

### C. Needs Assessment Summary

***//2010/ The original Needs Assessment Summary has been revised and summarized.//2010//***

The PR MCH needs assessment is a continuous activity carried out on a year-round basis. It provides the necessary feedback to readjust the MCH work plan to respond better to changes in health needs of the target population.

Currently we are focusing on 4 main categories as the contributing factors to maternal and infant morbidity and mortality: socioeconomic factors, lifestyles and maternal health, prenatal and perinatal factors and postneonatal factors.

The 2005 US Census Population Estimates revealed that women in their reproductive age (WRA) comprised 32% (1,135,742) of the population in PR (3,921,054), while 29.4% were children 0-19 years old.

The number of births/year decreased only 0.23% from 2003 (50,803) to 2005 (50,687). Therefore, the true natality rate remained steady during this period (2003: 13.1/1,000 inhabitants; 2005: 13/1,000).

The 2006 ESMIPR most outstanding findings were: 65.5% of surveyed mothers did not plan the index pregnancy; 6.9% did not want to be pregnant then or in the future; 20.8% gained weight below the recommendations while 44.5% gained more weight than recommended; 58.5% did not consume folic acid or multivitamins during the month prior to conception; 2.7% smoked; 3.4% consumed alcohol and 0.3% used some illicit drug during pregnancy.

VS data for PR in 2005 showed that nearly 1:4 pregnant women initiated PNC after the first trimester or had no PNC, placing them at greater risk of poor maternal and birth outcomes.

The stillbirth rate for PR was 10.7/1,000 live births (LB), standing above the HP2010 set target for fetal deaths (6.8/1,000).

To monitor infant and maternal mortality rates in PR, the MCH Division has established two surveillance systems. The IM rate for 2005 (9.3) persists above the mainland rate and the HP2010 goal (6.2/1,000 LB). Contributing factors are negative social conditions, unhealthy physical environments, and quality of care, among others.

The postneonatal mortality rate in PR for 2005 (2.7/1,000 LB) is close to the 2010 set target of 2.4/1,000 LB.

In 2005-2006, the 3 most commonly reported health conditions in Head Start children were dental caries (43.4%), asthma (22.5%), and anemia (13.4%).

Forty-two preschool children aged 1-4 died in 2005 mainly due to: unintentional injuries (16.7%), congenital anomalies (14.3%), circulatory system and nervous system diseases (11.9%, each), malignant tumors (9.5%), and respiratory system diseases (7.1%).

During the past decade, the mortality rate among children 1-14 years old has declined (2005:

13.6/100,000 vs. 1995: 29.2/100,000). Unintentional injuries (17.4%), malignant tumors (8.3%), and congenital anomalies (6.4%) were the main causes of death.

Unintentional injuries were a significant public health concern in PR in 2005. Among the 1-19 years old population, the most common causes were associated with motor vehicles, poison, drowning, choking, falls and burns. They were the first cause of death among those 10-14 years old and the second for the 15-19 age groups.

Data provided by PININES, ASES and the Health Insurance Commissioner showed that bronchial asthma, congenital anomalies, mental disorders and diabetes mellitus were the first 4 most frequent conditions for CSHCN 0-21 years old in 2005. The BDSS reported Congenital Heart Defects, Cleft Lip/Palate and Down syndrome as the 3 most frequent conditions diagnosed at birth or until age six.

Major difficulties reported by families through focus groups include referrals to specialists, lack of care coordination and family-centered services, non-covered costs by health insurance, lack of information on available services and how to get access, lack of communication among specialists and primary physicians and limited knowledge of physicians on typical child development.

Some identified priorities were improved coordination among health care plans and primary physicians, health professionals and community-based organizations and to promote successful transition of youth to adult life.

In FY 2005-2006, Pediatric Centers served 8,172 children, including those 0-3 years old served by the EIP. The 3 most common disabilities among 3-21 years children enrolled in the PR Special Education Program were Specific Learning Disorders, Speech and Language Disorders and Mental Retardation (Table II-6). PININES March 2007 data showed that 470,097 children 0-21 years were eligible for GIP; of these, 16,120 were CSHCN.

We hope this needs assessment has provided a clear vision of the needs of the MCH population in PR, and of our efforts toward improving their health.

/2009/ PC served a total of 7,885 in FY 2006-2007. PININES March 2008 data revealed 447,829 children 0-21 years were eligible for Medicaid and the GIP; of these, 15,881 were CSHCN.//2009//

/2009/The MCH and collaborators constantly update pertinent MCH data, identify highly prevalent emergent health conditions, conduct surveillance, monitor changes in public policies, evaluate experts' opinions and recommendations and the political environment. Emerging pediatric trends in areas such as obesity, mental and oral health led to expanding priority 3 to include pediatric health.//2009//

***/2010/In 2007, there were 1,131,864 WRA in PR, and 1,120,738 children 0-19 years old.***

***In 2007, 67.9% of female-headed families with children were living in poverty. This denotes a 17.5% increase from 2005 (57.8%). Also, about 12.8% of children less than 18 years old are under the care of their grandmothers.***

***An 8.0% decrease was observed in the number of live births in PR, when comparing those in 2005 (50,687) and 2007 (46,719). The crude natality rate in 2007 was 11.8/1,000 inhabitants, a 37.6% decrease from the rate in 1990 (18.9/ 1,000).***

***The ESMIPR 2008 found that 65.9% surveyed mothers did not plan their pregnancy; 5.8% did not want to get pregnant then or ever; 65.5% did not consume folic acid during the month prior to pregnancy; 3.8% consumed alcohol while 2.7% smoked during their***



*pregnancy; and 0.5% used illicit drugs.*

*VS 2007 data disclosed that 82.0% of pregnant women had early PNC; the rate remained the same as in 2006. Only non GIP population reached the goal of 86%.*

*Premature birth and low birth weight rates decreased by about 2.0% and 4.0% respectively from 2006 to 2007.*

*IM showed a downward trend. It dropped 1.1% from 2005 (9.3/1,000 LB) to 2007 (8.3/ 1,000).*

*Caries (27%) and asthma (15.4%) are still the most prevalent conditions in Head Start children for SY 2007-2008, but rates have decreased from those in 2006-2007 (caries: 34%; asthma: 17.9%).*

*Unintentional injuries continued being the leading cause of death for children 1-14 years old in 2008, most due to motor vehicle crashes.*

*PC served 8,155 children in FY 2007-2008, a 3% rise from previous FY. PININES March 2009 data reported 431,169 children 0-21 years were eligible for Medicaid and GIP; 14,936 of these were CSHCN. The PR Special Education Program served 103, 118 children 3-21 years, an increase of 3.44% from last year. Most common disabilities continued being Specific Learning Disorders, Speech and Language Disorders and Mental Retardation (Table II-6).//2010//*

### III. State Overview

#### A. Overview

##### Geography and Political Context

Geography: Puerto Rico (PR) is a Commonwealth of the United States (U.S.). It is the smallest of the Greater Antilles islands located in the Caribbean, about 1,000 miles southeast of Miami and 80 miles West of the U.S. Virgin Islands. The island of PR is 100 miles long and 35 miles wide for an approximate area of 3,500 square miles. Puerto Rico has four main offshore islands--Vieques and Culebra to the east, and Mona and Desecheo to the West. Mona and Desecheo are deserted islands. The population of Vieques and Culebra has to travel to PR in small planes and boats in order to access secondary, and tertiary health care as well as other human services.

The Dominican Republic, another of the Greater Antilles islands, is located west of Puerto Rico. Our proximity allows for mutual tourism and the sharing of economic and cultural resources. However, it also allows the entry of a significant number of illegal immigrants affecting our health care systems as well as our health indicators.

Geographically, the Island is divided in 78 jurisdictions known as municipalities, each headed by a mayor who is elected every four years. The largest municipalities in Puerto Rico are San Juan, the capital; Bayamón, Carolina, Caguas, Arecibo, Mayaguez and Ponce.

The climate of the Island is a tropical maritime one, with an average high temperature of 86 degrees (F) and a low average temperature of 66.9 degrees (F). The Atlantic Ocean borders the North of PR and the Caribbean Sea border the South Coast. Due to its location in the Caribbean, PR is highly vulnerable to the strike of hurricanes.

Political Context: Puerto Rico has been part of the United States since the end of the Spanish-American War (1898), and became a commonwealth in 1952. Politically, the Island resembles the 50 states. Every four years, the people of Puerto Rico elect a governor, 28 senators, and 51 House members to serve in the local government. Puerto Rico's voters also elect a nonvoting delegate to the U.S. House of Representatives.

The United States maintains control over Puerto Rico's military defense, transportation, immigration, foreign trade, and many other areas of governance. Puerto Rican residents contribute to Social Security, serve in the U.S. military, and can be called for military service. They do not pay federal income taxes and do not vote in U.S. presidential elections. Puerto Ricans are eligible to participate in federal government programs, but levels of assistance are typically lower than those provided for people living in the 50 states and the District of Columbia. For example, in 2004-2005, the average monthly payment to families through the Temporary Assistance for Needy Families (TANF) program was \$60 in Puerto Rico, compared with \$454 in New York--the state where Puerto Ricans are most highly concentrated.

/2008/ In 2005-2006, the average monthly payment to families through the Temporary Assistance for Needy Families (TANF) program was \$58.84 in Puerto Rico.//2008//

***/2010/ In CY 2008, the Temporary Assistance for Needy Families (TANF) Program provided an average monthly payment of \$73.30 to families in Puerto Rico.//2010//***

In addition to TANF, there are several other federal programs that provide support for low-income children and families in Puerto Rico, including nutritional assistance programs, Head Start, Job Corps, and school lunch programs. Residents of Puerto Rico are not eligible to receive Supplemental Security Income and, because they do not pay federal income taxes, they cannot receive the Earned Income Tax Credit, an important source of support for many low-income working families in the United States.

Economic Profile: Fifty years ago, Puerto Rico was a largely rural island where most people made a living as farmers. Since becoming a commonwealth, Puerto Rico has developed closer economic ties with the United States, with increasing revenue from industry, agriculture, and tourism. While U.S. median household income increased by 7 percent between 1989 and 1999 (adjusting for inflation), median household income in Puerto Rico increased by 24 percent.

However, income levels in Puerto Rico still lag far behind those in the rest of the United States. In 1999, median household income in Puerto Rico was \$14,412. West Virginia's median household income--at \$29,696--was the lowest among the 50 states but was still twice as high as the median income in Puerto Rico. The median household income in New Jersey--at \$55,146--was the highest of the 50 states and was almost four times higher than the median income in Puerto Rico. Among Hispanic/Latino households in New Jersey, median household income was \$39,609, still more than two and a half times the median income in Puerto Rico. The level of poverty declined from 58.9% in 1990 to 48.2% in 2000. On the other hand, the number of families under the poverty threshold level off from 55.3% to 44.6 percent. The economic downturn since 2000 is likely to put an additional strain on the Island's limited resources.

/2008/ According to the 2005 Puerto Rico population estimate, the level of poverty was 44.9 percent. On the other hand, the number of families under the poverty threshold level was 41.1 percent.//2008//

***/2010/ The 2008 population estimate for Puerto Rico revealed that the level of poverty was 45.5%, while 41.1% of families were under the poverty threshold.//2010//***

/2007/ For the past year the executive and legislative branch (controlled by the opposing political party) have been attempting to reach a consensus agreement that can solve the financial crisis PR is currently facing. A large budget deficit, increasing government costs and reduced revenues have led to a proposed fiscal and financial reform. In the meantime, government officials have taken drastic steps to reduce government costs. These includes cost containing measures such as hiring freeze, reorganization and consolidation of government agencies, and a drastic reduction in funds available to maintain services at current levels. A reduction in the amount of federal funds made available to PR have made the situation even worse.//2007//

/2008/ Our government continues to adopt measures to deal with PR financial crisis such as hiring freeze, reorganization and consolidation of government agencies.//2008//

/2009/ For the past five decades the PR economic cycles have paralleled those in the US economy. However, in 2005 our economy began a downward spiral and local economists have recognized PR is in a recession. During this period over 100,000 direct and indirect jobs have been lost. In 2007 our economy grew at a negative rate of -1.8%. Experts believe some of the factors that contributed to this downturn are: the repeal of the 936 tax exemption status for investors doing business in PR, increasing fuel costs, increases in charges for basic utilities, the approval of a 7% local consumption tax and a government strongly divided across party line that has interfered with the approval of an economic stimulus package by the PR Legislators.//2009//

***/2010/ The new government, elected in the recent ballots, has adopted drastic measures to deal with the financial crisis in the Island. Law No. 7 of March 2009 mandates among other measures, the reduction of governmental budget by elimination of personnel in transitory positions and those permanent positions with less than 5 years in the workplace. This represents about 30,000 jobs. Reorganization and consolidation of government agencies continue.//2010//***

Population: Puerto Rico is one of the most densely populated areas of the world. According to the Census Bureau there were 3,808,610 people living in PR in 2000. This represents a population density of over 1,100 people per square mile, similar to the population density of New Jersey which is the most densely populated state. Over 94.4% of the population resides in the urban

areas, where an overwhelming concentration of people are found reaching figures close to 10,000 per square mile.

/2008/ According to the 2005 Puerto Rico Community Survey, the total population living in Puerto Rico was 3,912,054.//2008//

**/2010/ The 2007 Puerto Rico Community Survey reported that there were 3,942,375 persons living in the Island at the time.//2010//**

#### General Trends

The population living in Puerto Rico has increased during each decade since the first U.S. census was conducted in 1899. In 1899, there were nearly 1 million people living in Puerto Rico. By 1950 the population had more than doubled, reaching 2.2 million. During the past 30 years, increased migration from Puerto Rico to the U.S. mainland, combined with a decrease in fertility levels, has slowed population growth in the Commonwealth. Between 1970 and 1980, there was an 18 percent increase in the Commonwealth's population, followed by a 10 percent increase during the 1980s and only an 8 percent increase during the 1990s, bringing the total population to 3.8 million. In the United States as a whole, there was a 13 percent increase in the population during the 1990s. (Figure III-1)

The population under age 18 increased from less than 500,000 at the turn of the 20th century to 1.1 million in 1950. The child population increased slightly each decade during the 1950s, '60s, and '70s, but has decreased since then, from 1.2 million in 1980 to 1.1 million in 2000. Therefore, the number of children living in Puerto Rico today is roughly equal to the number of children living there in 1950. Between 1990 and 2000, the number of children in Puerto Rico decreased by 5 percent, compared with a 14 percent increase in the United States. Despite the recent drop in the population under age 18, the number of children in Puerto Rico has more than doubled during the past century.

/2008/ Between 2000 and 2005, the children's population decreased by 5.4%.//2008//

**/2010/ Between 2000 and 2007, the children's population decreased by 8.3%.//2010//**

The proportion of children in the population has also declined in recent decades. Between 1899 and 1960, the share of children in the population hovered around 50 percent. But since then, there has been a steady decline in the percentage of children, from 43 percent of the population in 1970 to 29 percent in 2000. This is only slightly higher than the percentage of children in the United States (26 percent) and is lower than the share of children in the nearby U.S. Virgin Islands (32 percent). The long-term decline in the proportion of children in Puerto Rico's population does not reflect a significant decrease in the number of children but rather an increase in the number of adults relative to the child population. (Figure III-2)

The decline in the proportion of the population under age 18 has been driven by two main factors. First, there has been a long-term decline in fertility rates in Puerto Rico. In 1950, the fertility rate in Puerto Rico was 5.2 births per woman. By 1970, it had fallen to 3.2 births per woman, and by 2000 it had dropped to 1.9 births per woman. The 2000 fertility rate in Puerto Rico was slightly lower than the rate in the United States as a whole (2.1 births per woman) and was substantially lower than the rate for U.S. women of Puerto Rico descent (2.6 births per woman). The decline in fertility rates in Puerto Rico during the 1950s and 1960s has been linked to increasing levels of female sterilization during those decades. Other factors, including a rising age at marriage and an increase in the use of oral contraceptives, have contributed to the decline in recent years, but sterilization continues to play a key role. In fact, the estimated percentage of married women in Puerto Rico who have been sterilized --46 percent--is higher than that of any other country for which we have data.

/2008/ According to the Births Certificates the fecundity rate in Puerto Rico continues at 1.9 births

per woman for year 2005.//2008//

***/2010/ The Birth Certificates show that for 2005 the fecundity rate in Puerto Rico was 1.7 births per woman.//2010//***

Second, many young Puerto Ricans and their families have moved to the U.S. mainland in search of greater job opportunities and higher wages. Between 1995 and 2000, the net movement of people age 5 and over from Puerto Rico to the U.S. mainland exceeded 100,000 migrants. This relatively high level of out-migration could contribute to the decline in the number of children in Puerto Rico in two ways--through the migration of children who come to the U.S. mainland with their parents and through the out-migration of people of reproductive age, which reduces the number of potential births that occur on the Island.

#### Female-Headed Families

Family structure has important implications for children. Children growing up in single-parent families typically do not have access to the economic or human resources available to children growing up in two-parent families. In the United States, the number of single-parent families has risen dramatically over the past three decades, causing considerable concern among policymakers and the public. While local social and cultural norms may influence the situation for children living in single-parent families (for example, they may benefit from extended family support), children in Puerto Rico growing up in single-parent families are still at an economic disadvantage relative to children growing up in families with both parents present in the household. About 44 percent of married-couple families with children were living in poverty in 1999, while among female-headed families with children, 71 percent were living in poverty. In the United States, about 7 percent of married-couple families with children--and 34 percent of female-headed families with children--were living in poverty in 1999.

/2008/ About 32.6% percent of married-couple families with children under 18 years old were living in poverty in 2005, while among female-headed families with children, 57.8 percent were living in poverty. //2008//

***/2010/ In 2007, about 31.7% of married-couple families with children under 18 years of age were living in poverty, while 67.9% of female-headed families with children were living in poverty.//2010//***

In 2000, about 27 percent of families with children in Puerto Rico were headed by a female householder. This represents an increase over the share of female-headed families with children in 1990 (22 percent) and is higher than the U.S. average. In the United States, the share of female-headed families increased from 20 percent in 1990 to 22 percent in 2000.

The proportion of female-headed families increased in 48 of the 50 states during the 1990s (Colorado and Utah were the exceptions). In the U.S. Virgin Islands, about 46 percent of families with children were headed by a female householder in 2000, up from 37 percent in 1990. These data suggest that the increase in female-headed households in Puerto Rico followed a trend seen throughout the United States.

/2009/ PR ranks 26 in population size when compared to all other states in the USA. Our population almost reaches 4 million (3,927,776). The Puerto Rico population pyramid has a narrowing base, a reflection of the lower percentages of younger people. The percent of the population comprised of children 0-19 continues to decrease, from 32% in 1990 to 28.4% in 2006. We estimate 36% of children under 18 years of age live in a female-headed household with no husband present. It is a culturally accepted norm for grandmothers to assume the care of children when their mothers cannot take care of their children. This is the case for 13.7% of children who are under the care of their grandmothers.

The Puerto Rican population is fairly homogenous. Among PRCS participants, 98.7% responded

they considered themselves Hispanic and only 2.9% were foreign born.//2009//

***/2010/ The population of children under 18 years old continues to decrease, from 32% in 1990 to 28.9% in 2007. We estimate that 38% of children under 18 years of age live in a female-headed household where a husband is not present. About 12.8% of children of this age range are under the care of their grandmothers.//2010//***

#### Poverty

In 1999, more than half of the children in Puerto Rico--58 percent--lived in families with incomes below the poverty line. Puerto Rico's child poverty rate was over three times higher than the child poverty rate in the United States (16 percent). American Samoa--at 67 percent--was the only U.S. state, territory or commonwealth with a higher child poverty rate than Puerto Rico in 1999.

Although poverty levels in Puerto Rico are still quite high, they declined significantly during the 1990s--a period of unprecedented economic growth in the United States. Between 1989 and 1999, the number of children in Puerto Rico living in families with incomes below the poverty line decreased by 18 percent, from 761,789 to 626,521. The percentage of children living in poor families also decreased, from 67 percent in 1989 to 58 percent in 1999. In the United States, the child poverty rate dropped from 18 percent to 16 percent during the 1990s.

The number of families living below the poverty line also declined, from 492,025 in 1989 to 450,254 in 1999. However, the number of female-headed families living in poverty increased by 12 percent, from 142,737 in 1989 to 159,205 in 1999. In 1999, the median income for female-headed families with children in Puerto Rico was \$6,888, compared with \$20,284 in the United States.

*/2008/ The number of families living below the poverty line also declined, from 450,254 in 1999 to 393,315 in 2005. Nevertheless, the number of female-headed families living in poverty increased to 170,518 for the same year. //2008//*

*/2009/ The Puerto Rico Community Survey (PRCS) is a nationwide survey designed to provide communities information on the changes they are experiencing. It is an ongoing survey that allows the Census Bureau to provide the nation with demographic data on a yearly basis instead of every 10 years. The PRCS is sent to a small percentage of the population on a rotating basis and helps inform decisions on policies, programs and services for communities. Its 2006 data confirms the economic difficulties children living in PR and their families face. It reports Puerto Rico ranks #1 in the nation in percent of children under 18 years below poverty level in the past 12 months (for whom poverty status is determined). The PR rate has increased from 54.7% in 2005 to 56.3%, which compares unfavorably with the national rate of 18.3%. The PRCS also reports 39.9% of children live in households that received public assistance in the past 12 months, such as cash public assistance income or Food Stamp benefits.*

In 2006, 45% of people were in poverty. The median household income in the past 12 months (in 2006 inflation adjusted dollars) was \$17,621, a slight increase from its 2005 level of \$17,184. That same year the per capita income in 2006 inflation adjusted dollars was \$9,474. Forty-two percent of all families and 60% of families with a female householder and no husband present had incomes below the poverty level.//2009//

***/2010/ The Puerto Rico Community Survey (PRCS) continues reporting that PR is #1 in the nation in percent of children under 18 years old below poverty level in the past twelve months. The rate for PR decreased from 56.3% in 2006 to 55.3% in 2007. Nevertheless, this rate continues being much higher than the nation's rate at 18.1%.***

***In 2007, people living in poverty comprised 45.5% of the population. The median household income in the past 12 months was \$17,741 (in 2007 inflation adjusted dollars). The per capita income for that same year was \$9,639. About 41.4% of all families and***

***58.2% of families with a female householder with no husband present had incomes below the poverty level.//2010//***

Education: According to the Census Bureau the illiteracy rate in 1990 was close to 10% (data is not available for 2000). This proportion of analphabetisms is unacceptable in PR, if we consider the high number of public and private schools available in the Island. In 2004-2005, there were 1,528 public and 672 private schools. The number of students enrolled in the public education system was 575,387 and 133,637 in the private system. It is important to highlight that the number of students has been consistently declining during the last decade. In 2000-2001, the number of students in the public system was 612,024 vs. 575,387 in 2004-2005 (<6%).

In addition to the primary and secondary education system is the higher education system. Over 55 institutions of higher education have been established in PR since 1980. These include four Schools of Medicine; the University of PR School of Medicine which includes the School of Public Health and three private School of Medicine located in Bayamon, Caguas and Ponce. These schools provide a wide array of degrees of health professionals in addition to MD's, Dentists and nurses.

***/2010/ In 2007, the number of students enrolled in school was 796,422. Of this, 76% were enrolled in the public education system and 23.7% in the private system.//2010//***

#### High School Dropouts

During the past 50 years, Puerto Rico experienced a relatively rapid shift from small-scale agricultural production to an industrial and service-oriented economy. This transformation has led to a growing demand for educated workers with high school, college, and postgraduate degrees. In Puerto Rico, as in the United States, a high school diploma is a critical prerequisite for many entry-level jobs as well as for higher education. However, many young adults in Puerto Rico do not graduate from high school. In 2000, about 14 percent of 16-to-19-year-olds in Puerto Rico were high school dropouts (not enrolled in school and non high school graduates). The high school dropout rate in Puerto Rico was relatively high compared with most states--exceeded only by Arizona (15 percent) and Nevada (16 percent). In the United States as a whole, about 10 percent of 16-to-19-year-olds were high school dropouts in 2000. Currently, it is estimated that nearly 40% of children who begin the first grade will desert from school before they reach the 12th grade.

/2008/ According to the 2005 Puerto Rico Community Survey, 11 percent of 16-to-19-year-olds in Puerto Rico were high school dropouts (not enrolled in school and non high school graduates).//2008//

***/2010/ The 2007 Puerto Rico Community Survey reported that 11% of 16-19 year olds were high school dropouts (not enrolled in high school and not in the labor force).//2010//***

However, even though the dropout rate in Puerto Rico remains relatively high, there has been considerable improvement in this measure since 1990, when 22 percent of 16-to-19-year-olds were not enrolled in school and not high school graduates. It is important to highlight that in the case of females, pregnancy is the most common cause for school dropout.

/2009/ The PRCS states that in 2006, 66% of people 25 years and over had at least graduated from high school; of these, 21% had a bachelor's degree or higher. Thirty-four percent were dropouts; they were not enrolled in school and had not graduated from high school.

The total school enrollment in Puerto Rico was 1.1 million in 2006. Nursery school and kindergarten enrollment was 114,000 and elementary or high school enrollment was 735,000 children. College or graduate school enrollment was 270,000.//2009//

***/2010/ According to 2007 PRCS, 66% of people 25 years or older had graduated at least***

***from high school while 21% had obtained a bachelor's degree or higher. Thirty-four percent were drop-outs. The total school enrollment in PR for 2007 was 1.1 million. Nursery school and kinder-garden enrollment was 112,000 while 732,000 children were enrolled in elementary or high school. College or graduate school enrollment was 281,000.//2010//***

#### The Need for Child Care

In this report, the need for child care is measured as the percentage of children under age 6 living in families where all of the parents in the household reported being in the labor force during the week before the survey. For children living in single-parent families, this means that the resident parent was in the labor force; for children living in married-couple families, this means that both parents were in the labor force.

Based on this definition, the need for child care is lower in Puerto Rico than it is in the United States. However, it is not clear from these census data whether the need for child care is low because women are not entering the labor force or whether women are not motivated to seek work because there are so few child care options available to them. In addition, it is likely that some women who are "not in the labor force" are working in the informal sector, providing domestic services or involved in other work outside of the formal labor force. Puerto Rico has a relatively large informal or underground economy, consisting mainly of self-employed workers--especially women. The informal sector includes many domestic services (cooking, cleaning, sewing) as well as more formal services, such as catering and child care services.

In Puerto Rico, 40 percent of children under age 6 lived in families where all of the resident parents were in the labor force in 2000, compared with 59 percent in the United States as a whole, and 69 percent in the U.S. Virgin Islands. The relatively low percentage of children in need of child care is associated with the low percentage of women who are in the labor force. In Puerto Rico, about one-third (34 percent) of women ages 16 and over were in the labor force in 2000, compared with 58 percent in the United States as a whole.

In Puerto Rico, as elsewhere, it is common for grandparents to provide child care while parents are working, and in many households, grandparents are the primary caregivers for young children. For the 2000 Census, the U.S. Census Bureau added a new question to measure the extent to which grandparents provided care to their grandchildren. In Puerto Rico, there were 133,881 grandparents who lived with their grandchildren in 2000, and about 53 percent reported that they were "responsible for most of the basic needs" of one or more of their co-resident grandchildren. This shows the importance of extended family members--particularly grandparents--as caregivers in the Commonwealth. In the United States, only 42 percent of grandparents who lived with their grandchildren reported being responsible for their care. (Reference: Children in PR: Results from 2000 Census. Kids Count, Annie E. Casey Foundation and the Population Reference Bureau, August 2003).

/2008/ In Puerto Rico, there were 131,355 grandparents who lived with their grandchildren in 2005, and about 50 percent reported that they were "responsible for most of the basic needs" of one or more of their co-resident grandchildren. In the United States, only 43 percent of grandparents who lived with their grandchildren reported being responsible for their care. (Reference: US Census Bureau, 2005 American Community Survey, Selected Social Characteristics in US and Puerto Rico). //2008//

***/2010/ In 2008, there were 121,717 grandparents living with their grandchildren under 18 years old. About 57,494 (47.3%) informed they were being responsible for their care.//2010//***

#### Summary



There was an increase of 7.5% in the total population reported in 2000 as compared to 1990. Nearly fifty-two percent (51.9%) of the population was comprised of females and 48.1% of males. The segment of children and adolescents between 0-19 years of age represented 32% of the total. The MCH population comprised by children and adolescents (0-19 years) and women 20-44 years of age surpassed fifty percent (50.5%) of the total population in the Island. On the other hand, the proportion of persons over 65 years of age reached 11.2% (425,137). The median age was 32.1 years, compared to 28.4 in 1990. The average family size was 3.1 persons. The population of female householders with no husband present was 21.3% compared to 23% in 1990. Among this group, 49% (131,854) of them had children less than 18 years of age under their custody.

/2008/ For 2005, more than fifty-two percent (52.3%) of the population was comprised of females and 47.7% of males. The median age was 34.4 years, compared to 32.1 years in 2000. The average family size was 3.5 persons.//2008//

***/2010/ In 2007, females constituted 52% of the population while 48% were males. The median age was 35.4 years. The average family size was 3.8 persons.//2010//***

According to the 2000 Census, the economic profile of individuals and families significantly improved during the last decade. The level of poverty declined from 58.9% to 48.2%, and the number of families under the poverty threshold leveled off from 55.3% to 44.6%.

The per capita income increased from \$4,177 to \$6,809 (63%). The mean income by household increased from \$8,695 to \$11,989 (34.9%) and the individual mean income grew from \$5,721 to \$10,403; an increase of 81.8%.

A variable not investigated in 1990 is one related with grandparents living with children under 18 years of age. A total of 133,881 grandparents lived in the same household with children under 18 years old. Among these, 52.5% were the main provider for their grandchildren. This situation should be studied in order to understand the reasons and the implications for children and grandparents.

Other indicators of the PR's economic profile are the unemployment rate, number of participants in the Nutritional Assistance and TANF programs, and the number of individuals holding the GIP. As mentioned elsewhere, in 2000 the Census Bureau reported 3,808,610 persons and 1,261,325 families residing in the Island.

The unemployment rate increased from 10.5% in February 2000 to 13.7% in February 2002. This represents an increase of 23.4%. Among adolescents and young adults unemployment is even higher, creating a fertile environment for criminal activities and other social problems. It is important to underscore, that in spite of the upward trend in the unemployment rate, there is a downward trend in the number of families and persons participants of the Food Stamp and TANF programs.

/2008/ The unemployment rate increased from 13.7% in 2002 to 15.2% in 2005. This represents an increase of 10.9%. Data from 2005 Puerto Rico Community Survey revealed that for the employed population 16 years and older, the leading industries in Puerto Rico were educational services, health care and social assistance, 21 percent, and retail trade, 13 percent. //2008//

/2009/ Unemployment continues to increase. It has been rising from 10.5% in 2000 to 15.7% in 2006.//2009//

***/2010/ The unemployment rate increased to 16.0% in 2007, a 1.9% increase when compared to that of 2006 (15.7%). According to PRCS in 2007, the employed population 16 years and older were 1,184,129 and the leading industries in PR were retail trade (22.4%), educational services (11.4%), health care and social assistance (11%) and manufacturing (10.7%).***

***In May 2009, the labor force in PR was estimated at 1,335,000 persons, of which 1,143,000 were employed while 191,000 were unemployed. If one compares these figures to those in May 2008, there has been a decrease of 76,000 in the number of persons employed. This reduction has been accompanied by an increase of 35,000 persons that have joined the unemployment ranks. This means that the annual changes brought about a reduction of 40,000 persons in the labor force.//2010//***

In FY 2004-2005, the average number of beneficiaries participating of the Nutritional Assistance program on any given month was 1,047,267 persons and 457,618 families. These figures represent 25.7% and 36.3% of all individuals and families in PR as reported by the 2000 Census Bureau. It is important to highlight that in 1992, the total number of participants of the Food Stamp program was 1,480,457. A decline of 29% is observed in the number of the participants of Food Stamp program in spite of the increase in the population during a period of 13 years.

/2008/ In FY 2005-2006, the average number of beneficiaries participating of the Nutritional Assistance program on any given month was 1,062,967 persons and 478,774 families. //2008//

***//2010/ During CY 2008, the average number of beneficiaries participating of the Nutritional Assistance Program on any given month was 69,106 persons and 53,154 families.//2010//***

In 1998-99, there were 76,146 families and 153,427 individuals enrolled the TANF program. During current year (2004-05), the number of participant families declined to an average of 56,680 and 85,110 persons per month. These figures tell us that the number of participant families in the TANF program has decreased by 27.5% in a 6-year's period. Among all families 15,930 of them have children under 18 years old for a total of 30,977. It is unclear if delinked families and individuals from the TANF program are self-sufficient or simply it is the result to be in compliance with administrative procedures required by federal mandates.

/2008/ During current year (2005-06), the number of participant families enrolled in the TANF Program increased to an average of 78,245 and a decrease of 81,857 persons per month was observed.//2008//

These downward trends in the number of families and persons participants of the Food Stamp and TANF programs would be the results of the implementation of the PR Welfare Reform Act (PRWORA) and not necessarily it reflects an improvement of the socioeconomic status of the population.

Race and Ethnicity: The 2000 Census was the first census in Puerto Rico since 1950 to include questions about race or ethnicity. For people in Puerto Rico, as well as Hispanics/Latinos living in the United States, "race is a flexible concept". This is evident in a comparison of race responses between people living in Puerto Rico and Puerto Ricans living in the United States. Although the groups share the same heritage, they have very different ideas about racial identity. About 81 percent of people in Puerto Rico identified themselves as white in the 2000 Census, but Puerto Ricans residing in the United States were almost equally likely to say they were white (46 percent) as "some other race" (47 percent).

The most significant ethnic groups residing on the Island are Dominicans and Cubans. Most Dominicans are concentrated in the metropolitan areas close to San Juan. A significant number of Dominicans are undocumented. In 1998, the U.S. Immigration Agency reported 7,540 new lawful permanent residents' aliens and approximately 37,700 illegal residents in the Island. Puerto Ricans, Dominicans and Cubans have a Hispanic background. Spanish is the official language of the Government of Puerto Rico. In addition, a significant proportion of Puerto Ricans can also communicate in English quite well.

***//2010/ In 2008, the U.S. Immigration Agency reported 3,287 persons obtaining legal***

***permanent resident status in Puerto Rico.//2010//***

The 2000 Census revealed the following ethnic composition in PR: 95.1% Puerto Ricans, 0.5% Cubans, 0.3% Mexican and 2.8% other Hispanic or Latino. Only 0.2% were Asian, Native Hawaiian and other Pacific Islander. Interestingly, according to the Census, 84 percent of the population residing in the Island was White, 10.9% Black and 9.6% some other race.

***//2010/ According to the 2007 PR Community Survey, the major ethnic groups living in the Island are Puerto Ricans (98.7%), Dominicans (1.7%) and Cubans (0.5%).//2010//***

**Vital Events 2003**

**Births:** Figure III-3 depicts the vital events registered in PR in 2003. In 2003, the estimated population was 3,878,531. A total of 50,803 live births were registered; 99.9% occurred in hospitals. Only 63 (.1%) live births occurred at home and other places. The natality rate was 13.1/1,000 inhabitants as compared to 18.9/1,000 in 1990. These figures represent a decline of 30.7% in the crude natality rate in PR. On the other hand, the C/S rate reached 46%.

***//2007/ Vital Events 2004***

**Births:** Figure III-3 depicts the vital events registered in PR in 2004. In 2004, the estimated population was 3,894,855. A total of 51,239 live births were registered; 99.9% occurred in hospitals. Only 63 (.1%) live births occurred at home and other places. The natality rate was 13.1/1,000 inhabitants, compared to 18.9/1,000 in 1990. These figures represent a decline of 30.7% in the crude natality rate in PR. On the other hand, the C/S rate has remained steady at 48% for the past two years.//2007//

***//2008/ Vital Events 2005***

**Births.** Figure III-3 depicts the vital events registered in PR in 2005. In 2005, the estimated population was 3,912,054. A total of 50,687 live births were registered; 99.9% occurred in hospitals. Only 11 live births occurred at home and other places. The natality rate was 13.1/1,000 inhabitants as compared to 15.6/1,000 in 2000. These figures represent a decline of 19.1% in the crude natality rate in PR. On the other hand, the C/S rate has remained steady at 48% for the past three years. //2008//

***//2009/ Vital Events 2006***

**Births:** Figure III-3 depicts the demographic and vital events data registered in PR in 2006. In 2006, the estimated population was 3,927,776. A total of 48,744 live births were registered; 99.9% occurred in hospitals. Only 63 (.1%) live births occurred at home and other places. The natality rate was 12.4/1,000 inhabitants, compared to 18.9/1,000 in 1990. These figures represent a decline of 30.7% in the crude natality rate in PR. On the other hand, the preliminary C/S rate experienced a slight increase reaching 48.3%.//2009//

***//2010/ Vital events 2007***

***Births: Figure III-3 depicts the demographic and vital events data registered in PR in 2007. The estimated population was 3,942,375. Live births registered were 46,717; 99.4% occurred in hospitals, while 37 (0.1%) occurred at home and other places. The natality rate was 11.8/1,000 inhabitants. When compared to 1990, the crude natality rate has decreased 37.6%. The preliminary C/S rate reached 49.3%.//2010//***

**Marriages and Divorces:** The rate of marriages was 6.6/1,000 inhabitants and divorces occurred at a rate of 3.8/1,000 inhabitants.

***//2007/*** The rate of marriages was 7.8/1,000 inhabitants and divorces occurred at a rate of 5.0/1,000 inhabitants.//2007//

**General Mortality:** Total deaths amounted to 28,356, a rate 7.3/1,000 persons. The ten leading

causes of death were: (1) Heart Diseases; (2) Cancer; (3) Diabetes; (4) Hypertension; (5) Chronic Pulmonary Diseases; (6) Alzheimer; (7) All Accidents; (8) Pneumonia and Influenza; (9) Cardiovascular Diseases; and (10) Nephritis and Nephrosis.

/2008/ General Mortality: Total deaths amounted to 29,709 in 2005, a rate 7.7/1,000 persons.  
//2008//

**/2010/ General Mortality: A total of 25,589 deaths occurred in 2006, a rate of 6.5/1,000 inhabitants.//2010//**

Infant Mortality: Figure III-4 illustrates the downward tendency of the infant mortality rate (IMR) in PR from 1990 to 2000. During a ten-year period the IMR declined 26.1%. However, from 2000 to 2003 it has dropped only 1.1%; from 9.9 to 9.8 per thousand live births.

/2007/ The downward tendency of the infant mortality rate continues. The IMR for 2004 was 8.1/1,000 live births.//2007//

/2008/ Infant Mortality: Figure III-4 illustrates a stable tendency of the infant mortality rate (IMR) in PR from 2000 to 2005. The IMR was 9.3 for the year 2005. //2008//

/2009/ The infant mortality rate showed a slight decrease reaching 8.7/1,000 live births (see Figure III-4).//2009//

**/2010/ The infant mortality rate in 2007 showed a slight decrease at 8.3/1,000 live births (preliminary data).//2010//**

**An attachment is included in this section.**

## **B. Agency Capacity**

The health care delivery environment has been evolving during the last decade in the Commonwealth of PR as a result of the implementation of a Health Care Reform (HCR). Therefore, an understanding of the changes that are occurring in the Health Care System (HCS) of PR is important to providing the context of the MCH/CSHCN programs priorities and activities.

In this section we pretend to provide the reviewers of this application a synopsis of the traditional HCS of the Commonwealth of PR; and the reasons behind its reformation into a privatized managed care model of health services.

Traditionally, the HCS in PR was divided into two parallel systems, public and private sectors. The public sector was responsible for addressing all health care needs for almost 60% of the population with low-income or uninsured. On the other hand, the private sector served 42% of the population who could paid out of pocket or through third party payers.

The PRDoH historically functioned as the predominant provider of personal health services for low-income and uninsured populations. It operated through an extensive regionalized network of level one primary health care centers, at least one in each municipality; areas' hospitals (level II); regional hospitals (level III); and a Supra-tertiary Center, located at the PR Medical Center. However, in spite of this extraordinary network of facilities the PRDoH had to place restrictions on the scope of services available and compliance with the schedule of preventive services for low-income and uninsured populations. The HCS had a chronic limitation of trained health care providers and ancillary services such as laboratories, X-rays and pharmacy services, due to insufficient allocation of funds. There were both limited allocation of funds from the Commonwealth revenue and due to the cap in the Medicaid funds imposed to PR as well to other territories. Another limitation was that patients, who could paid for their services did not come to our system, except those with catastrophic illness referred by their physicians.

Over the years, PR's Medicaid program only paid for hospital-based services, including in-patient and outpatient care for categorically and medically needy persons. Because of this, Title V funds were used as the first payor for ambulatory care services for women in their reproductive age (family planning, prenatal and postpartum services), preventive services for children and specialized for CSHCN.

As earlier mentioned, the traditional HCS had primary health care facilities at each one of the municipalities. This was the portal of entry into the HCS for the low-income and uninsured MCH population groups. However, the reality was that primary centers were very under staff. In addition, the majority of the primary providers for women in their reproductive age, infants and children were general physicians who were untrained to address the needs of the high proportion of the at risk MCH population. Besides, they were insufficient in number to serve all the population of the municipality in need of services, including emergency services.

High-risk pregnant women and children were referred to Regional Hospitals for follow-up. Most of the times this was worse for the patient because of the distance they had to travel from their residency to the Regional Hospital for an appointment. As an example, a high-risk pregnant women living in Orocovis had to travel about 38 miles (one trip) in public transportation to reach the high-risk prenatal clinic based at the Bayamon Regional Hospital. In addition, due to the limitation of staff at Regional Hospitals and the high number of referrals the follow-up was not given according to the patient's condition. Other reasons for referrals to Regional Hospital were for laboratory and X-rays services. Children with special conditions ran the same luck as their mothers.

On the other hand, the segment of the population with private insurance or who could pay out of pocket (42%) had a private health care system with access to primary providers, specialists, laboratories, x-rays services, pharmacies and in hospital services at their community level or the nearest municipality to their residency.

In pursuing to eliminate or reduce the disparities in the accessibility and quality of health services provided to the low-income and uninsured population (+ 60%), an aggressive HCR was launched in PR about one decade ago. The HCR driving values are justice and equity for the low-income population in addressing their health services needs. The HCR is an initiative comprised by three main components. These include, (1) a Government Insurance Plan; (2) renting or selling its public health facilities; and (3) enhancing its role in performing the core functions of public health (assessment, policy development and assurance).

The HCR is mandated by Law No. 72 enacted on September 7, 1993. The HCR attempts to bridge the gaps in services between the public and private sectors through a Government Insurance Plan (GIP). At the same time, one of its goals was to privatize the public health care system through renting or selling its facilities. In addition, the DoH is expected to enhance its role in performing the core functions of public health following the recommendations of the State and Territorial Health Officials (ASTHO): assessment, policy development and assurance. As a result of the implementation of the HCR, the DoH instituted as its top priority the promotion and protection of health.

The initiative of the HCR was based in several basic principles. These are to:

1. Eliminate the public and private sector disparity and discrimination in health care;
2. Guarantee access to quality health care to all residents;
3. Have freedom for selection of a primary health care provider;
4. Increase the efficiency and productivity of the health care industry through a competitive mechanisms;
5. Improve the quality of services;
6. Modify the role of the government in the areas of health promotion, and disease prevention;

since participants have the option of selecting the health care site and provider. These principles enhance and guarantee universal access to adequate health care services.

Who benefits from the Government Insurance Plan?

- \*Medicaid Beneficiaries up to 200%
- \*Veterans (Non-Service Connected)
- \*Medicare Beneficiaries (Part A and B)
- \*Police Officers and their families
- \*Public Employees and their direct dependents.

The GIP has three primary objectives. These are: (1) Universal coverage; (2) Freedom of choice; and (3) Expanded benefit package.

The privatization effort is administered by a nonprofit corporation called the "Administración de Servicios de Salud" (ASES, Spanish acronym). This organization was created in 1993 under PR Law 72 and is responsible for a number of critical administrative activities, including:

\*Negotiating contracts. ASES is responsible for negotiating and awarding contracts to private insurers to provide services included in the ASES standard benefit package on either a fully- or partially-capitated basis through managed care systems.

\*Conducting quality assurance. ASES monitors managed care plans by requiring the monthly submission of service utilization data. Reimbursement of the health plans is contingent upon the submission of these reports. In addition, ASES is bolstering its monitoring activities through contracts with a number of organizations; a Peer Review Organization (PRO) is assessing the quality of ambulatory care services, PRDoH is monitoring hospital service quality, and other groups are monitoring regional activities.

\*Facilitating enrollment. ASES is responsible for enrolling eligible persons into the new system and coordinates eligibility determination activities with PRDoH. PRDoH Medicaid certification staff stationed at primary care centers determine which clients are eligible for the program and forward this information to ASES. ASES, in turn, provides contracted insurers with the names and addresses of eligible persons so that they can send them letters informing them of their eligibility and inviting them to enroll with a managed care provider in their community. Each enrollee receives a health insurance card which gives him or her access to health care services.

In February 1994, the Commonwealth of PR began the implementation of the aggressive HCR initiative mandated by Law 72, 2003. This led to the replacement of the extensive public health infrastructure that traditionally served low-income and uninsured residents in Puerto Rico. The public health service delivery system was incrementally privatized by June 2000. Under this reformed system, responsibility for providing personal health services to low-income and uninsured populations holding the GIP was transferred from the DoH to the private sector. Currently, all care is delivered through a managed care service delivery model.

/2008/ The law 72 mandating the implementation of the HCR was enacted in 1993.//2008//

The second component of the privatization process was the sale of the public health facilities. The Government had to amend State Law 31, which expedites and facilitates the sale of government owned DTC's and hospitals. The facilities were sold to private for profit and nonprofit organizations. The first request for proposal was announced in May 1997. As of June 2000, the DoH had sold 50 health facilities, including 8 hospitals. Other 10 facilities were rented or administered by the DoH. This component of the HCR was discontinued in 2001.

After the completion of the implementation of the GIP in July 2000, several laws and changes have been established. These include, but are not limited to:

\*Enactment of Law No. 194, August 2000. This law requires the establishment of an agency to advocate for the rights of patients holding the GIP.

\*Enactment of Law 408 of 2000. The PRDH is retaking the primary responsibility for the provision and coordination of mental health services for the population enrolled in the GIP.

\*Pilot project for the implementation of the Intelligent Card. This is an electronic card which contains sociodemographic data, relevant information regarding the health history of the patient, medications and other information.

\*Establishment of 14 Clinical Guidelines including Perinatal Services, EPSDT, Guidelines for the management of pediatric patients with asthma and diabetes.

***/2010/ A committee was established in May 2009 to review current perinatal guidelines and expand them to include preventive health measures for women in their reproductive years./2010/***

\*The Department of Health assumed the primary responsibility for immunization services after June 2002.

\*Increase the length of the contract between ASES and the Health Insurance Company to at least 3 years. The three health insurance companies that are providing the services for the population with the GIP are MCS, Triple S and Humana.

/2008/ The health insurance companies that are providing services for the population for the GIP are MCS, Triple S, Humana and Cosvi./2008/

***/2010/ The health insurance companies providing services to the population covered by the GIP are MCS, SSS, Humana, COSVI, First Medical, MAPFRE, among others./2010/***

Other changes under consideration are to: 1) Readjust the HCR areas to traditional Health Insurance regions; and 2) Contract directly with HMO providers. In July 19, 2002, Law No. 105 empowered Puerto Rico Health Insurance Administration (PRHIA) to conduct demonstration projects of contracting directly with providers, without intermediaries such as managed care organizations. The Demonstration Project began operations on July 1, 2003 with Alianza de Medicos del Sureste, Inc. (AMSE) as a sole provider assuming risks under the basic coverage. A second contract was negotiated with the Family Medicine Group on March 1, 2004. For this second group the Division of Education and Social Communication of the Secretariat for Health Promotion of the Department of Health provides prevention and education services under contract.

The PRHIA is also implementing what is called the "intelligent card", a pocket size card with a microchip that stores the subscriber's medical history including: personal data, diagnosis and medications, last five physician, hospital and emergency room visits, immunization history and more. As of April 2004 a total of sixteen thousand intelligent cards (16,000) had been distributed in the municipalities of Bayamon (4,000), Isabela (7,000) and Vieques (5,000). This is an initiative toward better access and quality of services since it offers electronic retrieval of all the necessary medical information to providers. The 1.5 plus million health care reform patients in Puerto Rico will eventually have an intelligent card. As of December 2004, the total number of beneficiaries was 1,521,981. Among these, 55.16% were WCBA, infants, children and adolescents.

/2007/ Discontinued due to lack of funding./2007/

Satisfaction with the GIP: Studies and surveys conducted by the "Administracion de Seguros de Salud de Puerto Rico" (ASES) or the Puerto Rico Health Insurance Administration, show a high percentage of satisfaction among the clientele. Close to nine out of 10 (87.8%) of those

interviewed reported being satisfied with the new service system. This finding is encouraging, because it is the best index of the success of HCR as a social justice project.

Among the reasons given by beneficiaries to preferring the new system in contrast to the traditional system are:

- 1.The Government Insurance Plan (GIP) is better than the services we had before.
- 2.The availability of more and better services.
- 3.There is more accessibility to medications and better pharmacy services.
- 4.There is better attention at the health service centers.
- 5.Services are free or require low co-payment.

The third component of the HCR is the transformation of the Department of Health from a disease-oriented agency to one that encourages health promotion and protection programs and primary, secondary and tertiary prevention programs within the context of a comprehensive continuum of public health services.

/2009/ HIC provide preventive and primary care services. ASES is negotiating a new 3 year contract with them.//2009//

State Health Agency's Current Priorities or Initiatives: In addition to the GIP, which is mainly implemented by ASES, and as a result of the HCR, the Department of Health has modified its role and approaches in pursuing the optimal health of the population. The Department of Health has been emphasizing in the core functions of public health that include needs assessment, policy development and assurance. It has also modified its role of a disease-oriented agency towards one of health promotion, disease prevention and health protection of the population at large.

A Strategic Action Plan has been developed which is divided into three major phases: planning, implementation and evaluation. A variety of initiatives or programs have already been implemented to address the health needs of the population at large or to segments of the population with special needs. These initiatives include, but are not limited to:

\* The Healthy Community Division of the Secretariat for Health Promotion - The mission of the program is to promote healthy lifestyles and behaviors of the diverse population groups in order to decrease mortality and morbidity due to chronic health conditions. The strategy to develop this concept and reach its goal involves a comprehensive health risk appraisal as well as an assessment of the needs and capacities of the participating communities. Challenges and opportunities to improve the health of the community are identified. Beginning with the mayor of the municipality, all community leaders are brought to the table to design a concerted action plan to address identified health needs. The Healthy Community Division has been implemented in 16 municipalities. In each of these Healthy Communities several health promotion and disease prevention programs are implemented in response to its specific needs and the available resources.

\* The Behavioral Risk Factors Survey, which is a national CDC-sponsored cross-sectional yearly study designed to identify health trends, lifestyles and behaviors among Puerto Ricans. Four questions addressed to identifying asthma morbidity were added this year.

/2007/ BRFSS now includes 17 questions on child, adult and work related asthma. Information will be included in the Asthma Surveillance System Report.//2007//

/2009/ BRFSS will now include a Folic Acid module.//2009//

**/2010/ In 2008, BRFSS included questions on child and adult asthma. During 2009, the BRFSS is carrying out the Asthma Call-Back which includes an adult and child**



**questionnaire including questions on health care utilization, asthma management, environment, medications, and cost of asthma care, work-related asthma, co-morbid conditions, and complementary and alternative therapies.//2010//**

\* The HIV Prevention Needs Assessment, an Island wide study of a large sample of high-risk populations. The purpose of the study is to identify the health needs of these groups. The results are used to design custom-made HIV/AIDS/STD primary and secondary prevention programs.

\* The Basic Sample Survey -This is an annual representative probabilistic survey of approximately 3,000 personal interviews that looks for sociodemographic characteristics, service utilization, prevalence of health conditions and the reasons for work absenteeism, including hospitalization and ambulatory conditions.

/2007/ Discontinued due to lack of funding.//2007//

Among the programs that contribute to address specific MCH needs are:

\* The Distance Learning (An Interactive Education program) - To educate and train private and public health professionals through nine transmission centers located at regional hospitals Island wide by means of telecommunications.

/2007/ Discontinued due to lack of funding.//2007//

\* Rape Victim Centers - The opening of four centers to assist rape victims ("Centro de Ayuda a Victimas de Violacion") and the expansion of services to assist domestic violence victims across the Island.

/2009/ Six Rape Victim Centers offer psychological help to victims and assist them with medical, legal and social issues. They educate the public, PCPs, distribute rape kits to ERs and have a 24 hr hotline.//2009//

\* The Oral Health Prevention Program - Under the Health Care Reform, oral health services are included in the benefit package. Patients are not required to obtain a referral to get oral health services. They can access oral health whenever they want and with their preferred dentist. In addition, the Division for Oral Health has a very active prevention program throughout the Island.

/2009/ The Dental School established a clinic to treat pregnant women and children. They provide hands-on training to dentists to improve their clinical skills. A Dental Home project is providing services in one poor and underserved SJ community.//2009//

\* The Immunization Program - The Puerto Rico Government established compliance with the Hepatitis B vaccination as a requirement for school admission, for those born from 1991 on, and those who are 13 years of age. Since 2000, all adolescents from 13 to 18 must be immunized against Hepatitis B. Puerto Rico has achieved high immunization rate in children through 2 years. Puerto Rico had been the jurisdiction with the highest percent of immunized children in the nation for three consecutive years. However, a marked decline in the proportion of immunized children 24 month old was observed as a result of the vaccine shortage occurred in the nation in 2002. Currently, we have achieved again levels over 90% of immunized children.

/2008/ Results from the latest study (2005) revealed that the immunization coverage in PR has increased to 94.5%. A new study is underway to determine coverage in 2007. The vaccine schedule has been modified to recommend 3 new vaccines (rotavirus, meningococcal and HPV). The MCH Division will continue collaborating with the PR Immunization Program. //2008//

/2009/ A workgroup has been convened to address the reduction in the number of providers and sites available to immunize privately insured children.//2009//

***/2010/ The 2009 revised immunization schedule recommends catch up efforts directed to guarantee 11-13 year olds receive a second Varicella dose. It also expands the age range for MCV administration to include children between 11-18 years old, and includes HPV administration for females in the 11-18 age group./2010/***

The Welfare Reform: We understand that the Welfare reform has not negatively affected the access to health care services of the low-income population. As mentioned elsewhere, one of the three components of the initiative of the HCR consists of a GIP for persons under 200% of the FPL. The GIP is paid mostly with state funds (84.7%). Medicaid funds represent only 12.1% of the total budget used to buy the GIP in PR. Over 1.5 million persons hold the GIP. This figure represents almost 40% of the total population residing in PR.

/2008/ The GIP is paid mostly with state funds (84.6%). Medicaid funds represent only 12.4% of the total budget used to buy the GIP in PR. Over 1.3 million persons hold the GIP. This represents almost 40% of the total population residing in PR. //2008//

***/2010/ The GIP is paid mostly with state and municipal funds (79.5%). Medicaid funds account for only 14.6% of the complete budget used to buy GIP services in the Island. Almost 36% (1.4 million) of the total population living in PR hold the GIP./2010/***

Puerto Rico CHIP Program: The PR CHIP plan was approved in June 1998. It started with an allocation of 9.8 millions. In 2004-2005, a total amount of 42.3 millions were used to contribute to buy a GIP for children who qualify for the CHIP program. It is estimated that the CHIP monies may be used to pay the GIP of about 50,000 children; considering the current annual premium of \$862.00 per person.

/2008/ PR SCHIP Program: In 2005-2006, a total amount of 41.1 millions were used to contribute to buy a GIP for children who qualify for the SCHIP program. It is estimated that the SCHIP monies may be used to pay the GIP of about 43,169 children; considering the current annual premium of \$952.08 per person. //2008//

The total population holding the GIP is 1,521,981. This figure includes 383,438 women in their reproductive age and 455,497 children aged 1-19 years. As of September 2004, the network of health care providers available to serve the low income population was the following: 410 OB/GYN's, 570 pediatricians, 210 family physicians, 1,062 GP's, 410 internists and 1,289 dentists.

/2008/ The total population holding the GIP is 1,373,934. This represents 409,386 women in their reproductive age and 440,083 children aged 1-19 years.//2008//

/2009/ The Licensing Board reports MDs, pediatricians and OBs have increased in number.//2009//

***/2010/ For CY 2008, a total of 423,391 women in their reproductive age and 461,764 children in the 1-19 age range are insured by the GIP./2010/***

Current MCH Priorities and Initiatives: As already described, in 1994, the Government of Puerto Rico began implementing an aggressive HCR, under which the public service delivery system was incrementally privatized in all the island's health regions. Under the reformed system, responsibility for providing personal health services to low income and under-insured populations was transferred from the public to the private sector and all care is delivered through managed care service delivery models. The Reform was first implemented in the sub-region of Fajardo and moved very quickly to other areas. Currently, the HCR is implemented Island wide.

The reformed system replaced an extensive public health infrastructure that traditionally served

low income and uninsured residents of Puerto Rico. The PRDH historically functioned as the predominant provider of personal health services for these populations, operating an extensive network of primary care diagnostic and treatment centers (86) and hospitals (9) reaching all corners of the Island.

The PRDH delegated the provision of direct care services to the private sector, through contracts with health insurers, while maintaining the non-delegable core functions of public health. These functions include needs assessment, policy development, assurance and training of health professionals. The Department of Health also retained the administration of certain federal programs and special services such as the WIC program, Medicaid, services for persons with AIDS and the MCH program, among others.

Considering the above context and the mandates of Title V, the MCH role was refocused to assure, at this time of transition, that the most vulnerable population does not fall through the cracks of the evolving system. The MCH struggles to enable women, infants, children, adolescents and CSHCN to receive high quality and comprehensive services across a system that is now more complicated. Responding to this need, two (2) new core programs were designed and incrementally implemented across the Island. One is the Home Visiting Program that serves pregnant women and children less than 2 years of age with multiple social and health risk factors through a case management care/coordination model. The other one is the Community Outreach program. Community outreach workers' main responsibilities are to identify pregnant women and children delinked from the HCS and to facilitate their enrollment into the GIP, coordinate inter-agency services and give follow-up to certain situations of the Home Visiting program's clients.

/2007/ As a result of the Health Care Reform, families struggle to obtain referrals to the Pediatric Centers for specialized services.//2007//

/2008/ The CSHCN Program is encouraging family participation in the CSHCN Committee to discuss family needs and concerns with ASES. Collaboration with ECCS is in place to increase the number of medical homes for all children, including CSHCN. //2008//

/2009/ Difficulties obtaining referrals is still an access barrier for specialized services and had led to a decrease in number of CSHCN served in PC. Initiatives are currently underway with the Secretary of Health, ASES and Humana to develop a pilot project to promote the implementation of medical homes for CSHCN.//2009//

**/2010/ The number of children served by PCs increased 3% compared to previous FY. The medical home pilot project will be implemented in IPA 318 Bayamón Region in collaboration with ASES and Triple C. PR EPSDT guidelines were revised and include screening for developmental delay and autism. Data on complaints of CSHCN families was requested from the Office of the Patient's Ombudsman to identify barriers to service access including GIP and other health insurances.//2010//**

Most important, as an aftermath of the delegation of the provision of direct services to the private sector, has enabled the MCH/CSHCN programs to dedicate more time and resources to the development and implementation of infrastructure building activities. These activities include creating partnerships, monitoring and evaluation, empowering communities, promoting healthy behaviors, building capacity, and advocating for supporting policies. Among these infrastructure building activities it is important to highlight the followings:

-Healthy Start Consortium/MCH Advisory Board: It is a multidisciplinary and intersectorial group of professionals and representatives of the MCH population. They are very committed and knowledgeable of MCH issues. The Advisory Board has been a fundamental piece in providing input regarding new priorities and strategies to address the needs of the MCH population within the emerging new health care environment. Most of their recommended strategies are integrated

in the action plan aimed at improving the health and well being of the MCH population including CSHCN.

-Breastfeeding Steering Committee: This committee is comprised by a wide array of stakeholders committed with the promotion of this important behavior aimed at enhancing the growth and development of children.

/2009/ Preconceptional Health Committee: It is developing a pilot project to improve the interconceptional health of Diabetic women.

Fetal Infant Mortality Review: The FIMR will allow a Review Team to review de-identified comprehensive information of infants who died in order to identify system related risk factors that can be addressed.

Regional Boards: They are the result of reinforcing SSDI regional boards with representatives of the ECCS State Team. They address barriers and problems related to the health care system at the regional level. Their input is included in the MCH needs assessment.

ABCD Screening Academy Award: It is helping implement a MH pilot project. ASES is providing PCPs with incentives. One of its key components is the use of a formal developmental screening tool.

ECCS is collaborating with municipal governments to establish Early Childhood Clearinghouses in their facilities. They will disseminate health prevention and promotion messages and information on available local services.//2009//

-Puerto Rico's Safe Kids Coalition: This is a non-profit multisectorial organization. Its goal is to reduce unintentional injuries among children and adolescents.

**/2010/ SKC lost their financial support and will not be able to continue conducting their activities.//2010//**

-Asthma Coalition: The Asthma Coalition was incorporated as an organization comprised by public organizations, private entities, academia and parents. Its goal is to reduce morbi-mortality rates due to asthma. The coalition holds monthly meetings.

/2007/ The Asthma Coalition has developed the PR State Plan and the Surveillance System. The Coalition has identified the need to train physicians in NIH Guidelines in order to decrease asthma morbidity.//2007//

/2009/ The first Epidemiological asthma profile was updated.//2009//

**/2010/ The Asthma Epidemiological Profile was printed and is being distributed. An educational module with CME credits was prepared for distribution among health care providers.//2010//**

-Title V Monitoring and Evaluation Section: This section monitors all national and state performance measures, evaluate outcome measures and support the MCH needs assessment process. It entails several ongoing activities such as the implementation of the SSDI action plan; a customized PRAMS of recent mothers conducted every other year; an Infant Mortality Epidemiological Surveillance System (SIVEMI, Spanish acronym); a Maternal Mortality Surveillance System; Integrated Index of MCH status by Municipality; one State SSDI Conference every other year and special applied studies aimed at increasing the knowledge on selected MCH problems.

/2009/ Recognizing the importance of having culturally sensitive programs, MCH has rehired an anthropologist to conduct qualitative studies on obesity, PTB and teen pregnancy.//2009//

-Birth Defect Registry: Currently this registry monitor the prevalence of 13 categories of birth defects; NTD's, cleft lip/palate, Down Syndrome, gastroschisis, limb defects, ambiguous genitalia, Trisomy 13, 18, albinisms, congenital heart defects and others.

/2007/ The Birth Defect Registry is now the Birth Defects Surveillance System. It monitors 38 birth defect diagnoses in all birthing hospitals.//2007//

/2008/ The BDSS currently monitors the occurrence of 7 categories of birth defects: central nervous system, orofacial, musculoskeletal, genitourinary, chromosome, cardiovascular and other. These categories account for a total of 43 birth defects, which includes: NTD's, cleft lip/palate, gastroschisis, limb defects, omphalocele, talipes equinovarus, ambiguous genitalia, Trisomy 13, 18 and 21, albinism, congenital heart defects, Jarcho-Levin syndrome, hypos/epispadias, and conjoined twins. //2008//

/2009/ Five new birth defects have been added.//2009//

***/2010/ In January 2009, 3 BD diagnoses were eliminated because of a significant sub report for the 3 conditions. This is due to: a) lack of diagnostic information, and; b) women giving birth outside PR after prenatal diagnosis was confirmed.//2010//***

-PININES (Proyecto de Identificación de Niños con Necesidades Especiales de Salud, Spanish acronym): Puerto Rico, as well other jurisdictions is not included in the SLAITS. However, we are not waived regarding the responsibility to gather the information to monitor the progress on performance measures that use the data collected through the SLAITS. Toward this aim we designed the PININES. This is a collaborative effort with the Medicaid Program. The certification instrument used by the Medicaid Program was modified with the assistance of the MCH/CSHCN programs to collect information about 13 common conditions among CSHCN in PR. PININES enable us to have an idea of the most common chronic conditions among children enrolled in Medicaid.

/2007/ The DHS requested TA to develop a SLAITS-like CSHCN survey. The survey will provide us with data needed to report on NPM. According to PININES data for this reporting year, the total number of children evaluated for Health Care Reform enrollment decreased by 0.19% in comparison to previous year. A reduction in the percentage of congenital anomalies and conditions associated to sensory organs was observed.//2007//

/2008/PININES data for 2007 revealed that 16,120 had a special need condition.//2008//

/2009/ PININES March 2008 data showed 15,581 out of 447,829 GIP eligible children had a special need condition.//2009//

***/2010/ State funds were identified to implement the PR CSHCN Survey. The company was contracted and the study began on January 2009.//2010//***

/2008/ The CSHCNP is in the planning phase of a study protocol to determine the prevalence of CSHCN in the island and to obtain data for the NPMs. We are actually gathering information from other states/territories regarding methodologies to determine prevalence of conditions of CSHCN and to obtain data for the CSHCN NPMs. //2008//

/2009/ The study protocol was completed and a company selected to perform the telephone interviews and obtain data for the NPM's. In February 2008, the MCHB notified us of the possibility they would fund the study if it was done simultaneously with IP Coverage study and using the same methodology.//2009//

-Folic Acid Campaign: This is a long-range collaborative campaign, which includes a broad array

of organizations, private and public agencies. This campaign has been very successful in decreasing the rate of infants born in the Island with neural tube defects. In fact, the National Birth Defects Prevention Network honored PR with the Birth Defects Education and Prevention Award for 2004. This award was in recognition of the outstanding activities of an agency to promote public awareness of birth defects through innovative and collaborative education and prevention efforts.

-Universal Newborn Hearing Screening Program (UNHSP): This program is in the process of implementing newborn hearing screening at all birthing institutions. The program has among its strategies an Advisory Community to help in the implementation process. Legislation has been passed to support the UNHS in PR.

/2007/ Thirty five birthing hospitals report they perform hearing screening. This year, 71% of babies were screened before discharge, a 45.7% increase.//2007//

/2008/ Forty birthing hospitals report they perform hearing screening. For 2006, 85% of babies were screened before discharge; a 10% increase compared to last year. //2008//

/2009/ The percent of newborns screened for hearing loss increased to 97.5% in 2007.//2009//

**/2010/ The percent of newborns screened for hearing loss increased to 98% in 2008.**

**The UNHSP collaborated with an initiative of the PR Veterans Administration Hospital for low income families in need of earphones at no cost. Children were identified by the DoH Pediatric Centers.//2010//**

-/2007/ Universal Newborn Metabolic Screening Program: This comprehensive program began in 1983. It screens, provides confirmatory testing, genetic counseling and treatment for infants with a confirmed diagnosis.//2007//

/2009/ The Program has a Mass Spectrophotometer and will expand the number of conditions screened.//2009//

**/2010/ Incompatibility situations between the MS/MS components had prevented the NSPHD from initiating testing. These were resolved and pilot testing and validation phase began in March 2009. Currently, about one third of the samples received by the NSPHD are being tested.//2010//**

-Emergency Medical Services System for Children, Program for the prevention of pediatric emergencies: This program was developed and implemented in the University Pediatric Hospital with the support of the MCH program. A Law was approved aimed at the sustainability of the program through the recurrent allocation of \$100,000 from state funds.

/2007/ Maternal Mortality Review Committee- A multidisciplinary committee has been established to evaluate pregnancy-related deaths identified by the maternal mortality surveillance system.//2007//

/2007/ Healthy Start Community Based Consumer Groups - Informal community based groups of participants in the Home Visiting Program. They meet to identify barriers to health care and health related problems and work toward eliminating them.//2007//

/2008/ The Abstinence Coalition is composed by public organizations, private entities, youth, parents, and physicians. Its goal is to recommend innovative strategies to decrease sexual activity and other high risk behaviors among youth.

The Perinatal Guidelines Review Committee: a multidisciplinary committee whose goal is to adapt

the perinatal guidelines to PR situation; with this adapted guidelines the evaluation subgroup will classify hospitals that provide perinatal services.

***/2010/ Preliminary results of the study to classify hospitals according to the perinatal services they provide were discussed with members of the Perinatal Care Guidelines Review Committee. Recommendations on how the hospitals should be properly classified were used to adjust the analysis and its conclusion is expected this summer.//2010//***

The Office of the Patients' Ombudsman is working on the BCAP initiative. Its first phase is improving birth outcomes and screening children ages 0-3 for developmental delays and referral to early intervention services, if needed. MCH is actively collaborating with this initiative.

The CSHCN Title V Committee meets bi-monthly to implement the plan developed to achieve NPMs. //2008//

***/2010/The CSHCN Director is a member of the Interagency Committee for the development and implementation of an autism public policy. The law project is presently in the Legislature. The CSHCN identified collaborators and established linkages with four autism family organizations as well as with agencies and programs for the development of a strategic plan in collaboration with the UCE-IDD as part of the Act Early Autism project.//2010//***

/2009/ The CSHCN Committee was able to develop an interagency workshop to share information with medical students about sensitivity, transition to adult life and other CSHCN related topics.//2009//

***/2010/ Currently, students from two schools of medicine (Bayamón and Caguas) are participating in the workshops.//2010//***

/2009/ BCAP is currently working to eliminate barriers preventing PCP from complying with the EPSDT schedule. Once measures to remove them are eliminated, compliance will be monitored.//2009//

In closing up this section, it is imperative to underscore that in PR we have a health care system in which the three sectors that affect the health decision --making are there. These are the:

-Informal sector based at the community level, consisting of individuals, families and concerned groups organized to promote specific health issues.

-Formal health care system consisting of network of health providers, organizations, public and private health institutions, and different levels of care that provide preventive and curative services.

-Intersectorial sector comprised by other public, private and non-governmental entities that indirectly influence health.

However, in spite of the above, this health care system has been inefficient in achieving its goal of enhancing the optimal health of all subgroups of the population. This is so because of its fragmentation and the lack of a well designed Health Management Information System (HMIS). A HMIS is necessary for the proper communication among all the parts comprising the HCS. Without it, managers are unable to manage their programs based on reliable data that may be transformed into the information needed for selecting the most appropriate interventions.

Toward this aim, the MCH program established the Monitoring and Evaluation Section of Title V described elsewhere. The current administration nominated a Health Commission to evaluate the HCR initiative. Last June both MCH/CSHCN directors participated in a public hearing conducted

by a subcommittee which is evaluating the health promotion and preventive components under the HCR. The MCH Director emphasized the impact of the GIP on goals and objectives set for the MCH population. We understand that major changes in the implementation of the HCR will result from the findings of this Commission.

/2007/ On February 18, 2005 the Governor created a Commission for the Evaluation of the Health Care System in Puerto Rico. It was entrusted with evaluating the current health care system and its increasing costs, and submitting recommendations to modify it in order to improve the health status of residents of PR. After a long process, the Committee submitted its report on November 2005. The report establishes the DoH as the lead agency for all public health efforts, responsible for establishing public policies and guidelines for health care, ensuring access to quality care for residents and providing low cost basic insurance coverage for the uninsured. It urges the creation of organizational structures that monitor health promotion and education activities and oversee the evaluation of health care system activities. The development of an Information System that would eventually facilitate the establishment of the electronic medical record is also included in the recommendations. The document recommends integrating the physical and mental aspects of health care provision.

The Commission recognizes changes should be made to the current health care system and it proposes two different health delivery systems scenarios. Both remove the economic risks of health care management from the primary care provider and place them in the hands of the government or the health insurance companies. It recommends changes should be gradually introduced after pilot projects are tested in a limited number of regions. The new coverage being suggested should have medication coverage and reduce medical liability risk for providers.

The new contracting cycle begins in July 2006. For this upcoming period several options are being considered. Most shift the financial risks away from the providers and into either the government or the health insurance companies. The main goal is to reduce payment to the health insurance companies. Several pilot projects will be taking place in diverse areas of the Island. Contracts for these pilot projects will be for one year. After the pilot test period ends, results will be evaluated to determine if the model is to be continued, expanded or eliminated. Under this new contract preventive health care services will be provided by the PRDoH. Recommendations will be implemented as funding becomes available.//2007//

### **C. Organizational Structure**

The Puerto Rico Department of Health (PRDoH) is the umbrella agency assigned in Article IV, Section 6 of the Constitution of the Government of PR responsible for all matters pertaining to public health, with the exception of maritime quarantine. The Secretary of Health is appointed by the Governor of Puerto Rico and confirmed by the Legislature.

The Administrative Order No. 179, signed by the Secretary of Health on January 15, 2003, determines the current organizational structure of the Agency (Appendix 1). It comprises 6 secretariats, 12 offices and programs and 6 administrations, the General Council of Health and the Corporation of the Cardiovascular Center of PR and the Caribbean, all responding directly to the Secretary of Health, as well as three offices which respond to the Sub-Secretary of Health.

#### **A. Assistant Secretariats:**

1. Secretariat for Planning and Development
2. Secretariat for Regulation and Certification of Health Facilities
3. Secretariat for the Prevention and Control of Diseases (ASPCD)
4. Secretariat for Health Promotion
5. Secretariat for Health Protection
6. Secretariat for Administration



B. Offices and Programs:

1. Office of the Secretary of Health
2. Office of Internal Audit
3. Office of Communications and Public Affairs
4. Office of Legal Affairs
5. Office of Informatics and Technologic Advances (OITA)
6. Office of Human Resources and Labor Relations
7. Office of Budget and Finances
8. Office of Catastrophic Funds
9. Office of PR for Coordination with PAHO-WHO
10. Office for the Administration of HIPAA Law
11. Office of External Affairs
12. Correctional Health Program

C. There are six (6) independent agencies, administrations, councils and commissions created by law under the umbrella of the DoH. These are the following:

1. Administration of Mental Health and Anti-Addiction Services: Law 67 enacted in August 1993.
2. Administration of Medical Services: Law 66 enacted in June 1978.
3. Corporation of the Cardiovascular Center of PR and the Caribbean: Law 51, June 1986.
4. General Council of Health: Law 23, June 1976.
5. Commission for the Prevention of Suicide: Law 227, August 1999.
6. Commission of Food and Nutrition: Law 10, January 8, 1999.

There are three (3) offices and programs that have been delegated under the supervision of the Sub-Secretary of Health. These are the following:

1. Office for Regulation and Certification of Health Professionals
2. Regional Health Coordinators
3. Office of Nursing Affairs

The current Administrative Order establishes the vision, mission, goals, organizational structure and core functions of its components under the umbrella of the DoH.

The goals of the DoH are to:

- \* Increase years of productive healthy life of all residents in PR;
- \* Reduce health disparities among residents in the Island; and
- \* Achieve access to preventive health services for all.

The DoH places special emphasis in health promotion, prevention and control of diseases, and protection of health. (3Ps)

The ASPCD is responsible for the development and implementation of strategies and activities geared toward the identification of risk factors contributing to poor health among all individuals. It is also charged with the development and implementation of needed programs aimed at the reduction or elimination of such risk factors and the prevention of diseases. Its approach is based on primary interventions at the community level and with special populations.

The ASPCD is comprised of a number of divisions and programs which address a wide scope of health needs of the different MCH population groups. These include the Division of MCH, Division of Habilitative Services, Division of Preventive Health, Central Office for AIDS Affairs and STD's, Mental Retardation Program, Division of Oral Health, Rape Victim Center and the WIC Program.

The PR Title V program is comprised of the MCH and CSHCN divisions, which are within the organizational structure of the ASPCD. Its directors work collaboratively and in coordination promoting the development of systems of care for all women and children and the provision of direct, supportive population-based and infrastructure building services. The goal is to decrease maternal-infant and pediatric mortality in PR. Each division is integrated by several programs, projects and activities supported by Title V funds and other federal initiatives.

Before the implementation of the HCR, PR's MCH program played many different roles in serving mothers and children, including providing direct services, administering population-based programs and assuming responsibility for core public health functions.

With the advent of the HCR and aided by the recommendations of a TA supported by Region II in 1995 (Health Systems Research, Inc.), the MCH services were refocused. Title V resources were directed toward filling the gaps in direct services not covered by the GIP, development and implementation of support programs for at-risk mothers and children, development of population based programs, infrastructure building services, such as conducting activities aimed at improving the integration of the public and private systems of health care, needs assessment, applied research, development of surveillance systems, inter-agency coordination of related services, professional development, public education, etc.

Since these divisions and programs are under the same leadership, the collaboration, cooperation and coordination of services among the central, regional and local staff is facilitated.

/2007/ On March 20, 2006 the Secretary of Health signed Administrative Order #207 which establish the new organizational structure of the Puerto Rico Department of Health (Appendix 1). This reorganization took into consideration similarities between programs, program size, efficiency, centralized vs. decentralized services, interdependency of functions, and the current government fiscal and administrative reform. The reorganization is expected to facilitate collaborative efforts and integration of projects. The new organizational structure has three main structural levels:

Advisory entities responding directly to the Secretary of Health:

- Health Council
- Regional Health Directors
- Internal Audit Office
- Legal Counsel Office
- Communication and Public Affairs Office
- Commissions for Suicide Prevention, Nutrition and Radiation Control
- Pan American Health Organization Office

Other entities responding directly to the Secretary of Health:

- Direct Service Health Care Facilities (ASSMCA, ASEM, Cardiovascular)
- Emergency Response Corps
- Research and Epidemiology Office
- Medicaid Office
- Public Policy Office
- Center for Bio-security Preparedness and Emergency Response
- Office for the Regulation and Certification of Medical Services Providers

Support Services Units: Provide administrative support:

- Auxiliary Secretariat for Health System Planning and Development
- Human Resources and Labor Relations Office
- Technology and Information System Office
- External Resources Office
- Auxiliary Secretariat for Administrative Affairs

## Fiscal Affairs Office

Operational Units: They provide health prevention, promotion and protection services at the central, regional and municipal level:

Auxiliary Secretariat of Family Health and Integrated Services

Auxiliary Secretariat for Health Promotion

Auxiliary Secretariat for Medical and Nursing Affairs

Auxiliary Secretariat for Health Care Facilities Regulation and Accreditation

Auxiliary Secretariat for Environmental Health and Public Health Laboratories

The highlights of the Administrative Order can be summarized as follows:

- Creation of an Auxiliary Secretariat for Medical and Nursing Affairs whose main responsibility is dealing with direct patient care (hospitals and clinics).

- Reinforcement and expansion of the Auxiliary Secretariat for Health Promotion. It will house services provided by the WIC Program, the Program for Disease Prevention and Control, Oral Health and the Nutrition Internship Program.

- Creation of the Research and Epidemiology Office and the Center for Bio-security Preparedness and a Public Policy Office. Both respond directly to the Secretary of Health.

- The Auxiliary Secretariat for Prevention and Disease Control changed its name to Auxiliary Secretariat of Family Health and Integrated Services. The Maternal and Child Health Division is included in this Secretariat, along with the Immunization Program, Center for Victims of Sexual Assault, Central Office for HIV and Sexually Transmitted Disease Affairs, Mental Retardation Services Division. (Appendix 2)

Some changes particularly affect Title V. Under this new organizational structure the Maternal, Child and Adolescent Division and the Habilitation Services Division are fused into one Division (Appendix 3). It is part of the Auxiliary Secretariat of Family Health and Integrated Services. Its name is the Maternal, Child and Adolescent Division comprised by three distinct sections:

- Perinatal, Child and Adolescent Services Section

Included in this section will be: Healthy Start Project, Comprehensive Adolescent Health Services Project, Abstinence Only Education Project, Birth Defects Surveillance System and the Folic Acid Campaign, System Development and Inter-agency Collaboration Project which in turn includes the Early Childhood Comprehensive System Project, the Asthma Program and the Asthma Surveillance System.

- Children with Special Health Care Need Services Section

It will include services provided by the Children with Special Health Care Needs Program, the Early Intervention System of Services and the Universal Newborn Hearing Screening Program.

- Evaluation, Monitoring, Research and System Development Section

The State System Development Initiative is an integral part of this section. //2007//

/2009/ The PR Office of Management and Budget has endorsed and made official the organizational structure established by Administrative Order #207 signed by the Secretary of Health on March 20, 2006.

As of March 2008 administrative and fiscal matters pertaining to federally funded projects will be handled exclusively by the External Resources Officer. He will be responsible for managing issues related to the NGAs and FSRs of all the projects and programs sponsored with federal funds. They will help programs comply with all the rules, regulations and reports required by the federal government within the specified timeline.

The MCH Division has just prepared a document that establishes the guidelines that to should be followed when project coordinators and fiscal and administrative components work with purchase orders. It establishes the procedures and timelines that must be followed when purchasing materials and equipment with federal funds. These guidelines should help us submit FSR in a more timely fashion.

The agency began implementing a new classification and retribution plan in July 2007. The purpose of the plan was to adapt the personnel classification and retribution scale to the role the DoH has assumed after the HCR began. It will allow the DoH to competitively hire and retain professionals in fields critically important to our infrastructure building activities such as epidemiology, biostatistics, data entry, informatics and evaluation. In addition to establishing these new personnel classifications, the plan has also improved the salary scales. These adjustments are expected to facilitate hiring new staff and retaining those that are performing well.//2009//

***/2010/ The official organizational structure established in 2006 remains the same, although fusion of Secretariats has taken place internally. The Auxiliary Secretariat of Health Promotion was eliminated and became part of the Auxiliary Secretariat of Family Health and Integrated Services, now known as the Auxiliary Secretariat of Family Health, Integrated Services and Health Promotion.//2010//***

***An attachment is included in this section.***

## **D. Other MCH Capacity**

### **MCH PROGRAM**

Some of the current projects, programs and activities based on the MCH pyramid of services are:

Direct Services: We fill in the gaps in services needed by WCBA and CSHCN that are not in the GIP package, including contraceptive methods and Rhogam immunization in the 3rd trimester. Over 40,000 women obtain contraceptive methods and 1,500 receive Rhogam per year.

/2007/Current budget reduction, family planning costs and the legislated salary increase for nurses have reduced our capacity to provide them. Resources will be invested preferentially on IB, ES and PBS.//2007//

/2008/The actual budget reduction, family planning costs, and legislated salary increase have reduced our capacity to provide them. Resources will be invested preferentially on IB, ES and PBS.//2008//

/2009/Women requesting birth control services we are unable to fulfill are being referred to 330, Title X clinics or PROFAMILIA. Reductions in federal and state budget allocations, legally mandated RN salary increases and the recently implemented HR Classification Plan have reduced CSHCN economic capacity to provide specialty services.//2009//

***/2010/ Due to reductions in federal and state budget allocations, orthoses, devices and metabolic products are not currently provided in PCs. These budget reductions have also reduce our capacity to fulfill the demand of contraceptive methods needed by the female population we serve.//2010//***

Enabling Services: Family support services for at-risk pregnant, postpartum women and children up to 2 years of age.

-Home Visiting/Healthy Start Program: An enabling, family-centered, community-based service provided by specially trained public health nurses to pregnant/postpartum women and children up

to 2 years of age with medical and social risk factors. The Home Visiting Nurses (HVN) conduct a comprehensive medical, psychosocial and environmental assessment, develop a tailored comprehensive care plan in conjunction with the family and coordinate needed services through referrals to the appropriate private or public entity in the community. During follow-up contacts with the family, the HVNs provide health education on a broad array of topics tailored to the family's needs. They conduct formal risk assessment for smoking, alcohol, drug use and maternal depression, providing orientation and referrals according to the level of risk. HVNs promote enrollment of mothers and children in a medical home as well as an inter-conceptional period of at least 24 months. Most HVNs have been trained to provide counseling on breastfeeding benefits and techniques. As of June 2005, there were 109 HVNs in 74 of the 78 municipalities. The caseload is 45-50 families for a service capacity of nearly 7,000 families per year.

-Perinatal Services: The MCH program has stationed 9 perinatal nurses (PN) at selected institutions that perform a significant number of deliveries. They are also trained in breastfeeding techniques, family planning, distribution of FP methods and risk assessment of mothers and infants. They provide individual and group education on a variety of topics, make referrals to HVNs and other needed services, collect perinatal data, participate in periodic surveys designed at the central level and are resources for the March of Dimes "Comenzando Bien" prenatal courses.

-Community Outreach: This is another important program developed as a result of the implementation of the HCR. It is staffed by 85 Community Health Workers (CHW) in 63 of the 78 municipalities. Among their main responsibilities are to identify pregnant women and children disconnected from the HCS and facilitate their enrollment into the GIP, coordinate interagency services, give follow up to certain situations of the Home Visiting clients as referred by the HVNs, conduct "Comenzando Bien" courses, provide orientation on MCH topics at the community level, disseminate educational materials, participate in health fairs and data collection, identify problems of access to health services and report to the appropriate level.

/2007/Financial constraints and a hiring freeze make replacing HVNs difficult.//2007//

/2008/Financial constraints and a hiring freeze make replacing HVNs and CHWs difficult.//2008//

/2009/We now have 93 HVN and 72 CHW.//2009//

**/2010/ We have 88 HVN and 63 CHW.//2010//**

Population-Based Services: The MCH program has directed more efforts to developing new population-based programs and enhancing its involvement with those available prior to the advent of the HCR. These include a newborn metabolic/genetic screening program, immunization program, prenatal care outreach, toll-free information line, public education on MCH topics, dissemination of educational materials, folic acid campaign to reduce birth defects, HIV counseling and testing of prenatal patients, AZT administration to HIV positive patients on a voluntary basis, and Universal Newborn Hearing Screening Program (UNHSP).

/2009/The UNHSP was awarded a 3 years competitive grant to implement innovative strategies to increase the number of babies that are followed up with audiologic evaluations by 3 months and treatment before they are 6 months of age.//2009//

The Comprehensive Adolescent Health program (SISA, Spanish acronym) integrates all activities directed at reducing adolescent risk factors: pregnancy, unintentional injuries, violence, alcohol and drug use, etc. SISA trains middle school students as peer health promoters and organizes various activities to support them in their work. In collaboration with the Kanopka Institute, SISA is developing a culturally appropriate curriculum on Positive Youth Development and a train-the-trainers guide to promote its application in agencies that serve adolescents.

At the central level SISA is comprised by a multidisciplinary team which includes the Associate Director (a physician with training in public health), a nurse, a social worker, an anthropologist, and a pediatrician with an MPH who coordinates the AEOP work plan. SISA also has 8 regional coordinators under the supervision of the Regional MCH Directors.

The Abstinence Education Only Program (AEOP) is integrated into SISA. Among its strategies are the Sex Can Wait Curriculum, peer groups led by mentor teachers, teacher training, parent workshops, summer camps and dissemination of educational materials.

***/2010/ Federal funds for AEOP will not be available after June 30, 2009.//2010//***

Infrastructure Building Services: This is an area of enormous development after the HCR. The MCH program has developed a section of programmatic advisors on reproductive health, pediatrics, social work and health education. The nutritionist and nurse coordinators retired last year.

The Title V Monitoring and Evaluation Section is located at this level of service. It is supported by the SSDI project and staffed by an extraordinary group of skilled public health professionals, including a Demographer who is the SSDI and Section Coordinator, a Biostatistician in charge of the PRAMS-like surveillance, two epidemiologists (master level), one in charge of investigations on reproductive issues and the other on children's health; an Evaluator in charge of the development and implementation of a maternal deaths surveillance system, a Programmer who supports all data infrastructure issues and coordinates with OITA, and the data contact, an Evaluator in charge of the Title V Electronic Monitoring System. He also collaborates with the Title V Director in the needs assessment and monitoring of the Title V action plan, designs instruments to collect qualitative data, and evaluates programs.

-MCH Advisory Body (Healthy Start Consortium): It is comprised of about 50 persons representing public agencies, academia, community organizations, and consumers. They provide input on the selection of MCH priority needs and how to address them, help in the coordination of services across public and non-governmental agencies and are resources for professional development.

-MCH Regional Working Groups (RWGs): These are comprised by members of public and private agencies and consumers. They facilitate coordination of services across agencies and programs and provide recommendations to deal with system problems that interfere with access to services.

/2007/-Maternal Mortality Review Committee: The committee members include a social worker, midwife, health educator, obstetrician, nurse, pediatrician and evaluator. It has been meeting regularly to review unidentified causes of maternal deaths with summaries of information gathered on maternal deaths. Based on information gathered and multidisciplinary evaluations, recommendations are made to improve the health care delivery system.//2007//

/2009/A FIMR project and a Preconceptive Health Committee are in place.//2009//

Other activities include the development of standards of care, interagency coordination, technical assistance and support of community programs, professional development in the area of MCH, information dissemination to concerned stakeholders, policy development and assurance of care, among others.

The MCH/CSHCN programs possess the technology (computers and statistic software) needed to perform an excellent work.

The MCH Director, a board-certified pediatrician with a master's degree in public health, has occupied different positions at the PRDoH for 28 years. He has been a primary health care provider, director of a pediatric residency program, and director of the MCH program at regional

level and holds the present position since Dec 1990. He was honored as the best student graduated from the MCH program at the 25th anniversary of the School of Public Health. In Nov 2004, he was the recipient of the 3rd Annual March of Dimes Jonas Salk Public Health Leadership Award.

/2007/The MCH Director retired in 2005 and a new acting Director was named.(Appendix 4A)//2007//

/2008/A new MCH Director, a pediatrician with an MPH, was named on 2006.(Appendix 4A)//2008//

/2009/The MCH Director appointed in Sept 2006 resigned in Oct 2007. A new Acting Director has been named. She is a board certified pediatrician with an MPH degree who has worked in the DoH since 1980. She has vast experience in clinical administrative and programmatic aspects of the MCH Division.(Appendix 4A)

The Adolescent Program Assistant Director, Anthropologist and ECCS Coordinator were rehired in Jan 2008.//2009//

**/2010/ An Obstetrician/Gynecologist was appointed as the new MCH Director in May 2009.//2010//**

To furnish the comprehensive array of services recommended by the MCH pyramid, we have 34 FT positions at the central level (Appendix 4) and 8 regional teams, each under the supervision of a Regional MCH Director. These teams are comprised of a coordinator of services for WCBA, coordinator of pediatric services, SISA coordinator, health educator, perinatal nurse and administrative support staff.

At local levels we have at least one HVN and one CHW. As of June 2005, there were 109 HVNs and 85 CHWs distributed across the Island. Four municipalities do not have HVNs and 15 lack CHWs.

#### CSHCN PROGRAM

Appendix 5 illustrates the organizational structure of the CSHCN program. It is comprised of several projects, programs and activities. These include 7 Regional Pediatric Centers (PCs), Early Intervention program (EIP), Early Childhood Comprehensive System project (ECCS), NUHSP, Asthma project, Folic Acid Campaign, Congenital Anomalies Registry, PININES and the Surveillance System of Autism Spectrum Disorders.

/2008/As of 2006 Administrative Order, the CSHCN Section is comprised of UNHSP, CSHCNP and EIP.//2008//

Direct Services: The CSHCN program provides services to eligible chronically ill and disabled children through its PCs, one rehabilitative hospital, specialty clinics at the University Pediatric Hospital, and 7 Immunology Centers for AIDS patients. Currently, the CSHCN program serves about 15,000 non-duplicated CSHCN per year.

/2007/During FY 2004-05, 10,808 non-duplicated CSHCN received services under Title V.//2007//

/2008/During FY 2005-06, 8,748 CSHCN received services.//2008//

/2009/During FY 2006-07, 7,885 CSHCN received services.//2009//

**/2010/ During FY 2007-08, 8,155 CSHCN received services. TV CSHCNP funds orthodontics services for children with Cleft Lip/Palate, neurosurgery and orthopedic surgery by experienced staff, not accessible through medical insurance coverage. The Cleft Lip/Palate Program reported 1,108 visits in 2007 and 1,268 in 2008.//2010//**

The PCs complement specialized services not covered by the GIP or provided in an insufficient

amount. They have been certified as providers of specialized services for the networks of the health insurance carriers. At these facilities, eligible children receive specialty care, assistive technology, ancillary services, and highly specialized services required by children with metabolic and genetic disorders and mental retardation. Children with AIDS or hemophilia are referred to the appropriate programs. Health insurance carriers are billed for services provided to children holding the GIP or a third party payor. Reimbursement monies revert to the PCs.

Direct services are also provided to pediatric patients with complicated asthma by the Pediatric Pulmonary Program located at the PR Cardiovascular Center. This program is fully supported with Title V funds.

/2008/The number of children served by the PPP was reduced by 49%. Since Dec 2006, services are not being offered. ASES is analyzing alternatives to continue these services.//2008//

Enabling Services: The CSHCN program provides care coordination services primarily to children with developmental disabilities ages 0-3 who are eligible for the EIP. Nurses have been trained to perform this activity. Case management is conducted collaboratively with the Association of Parents of Children with Disabilities (APNI, Spanish acronym). There are 75 case managers (Service Coordinators) distributed across the Island.

/2007/The CSHCN Program provides care coordination services primarily to eligible children 0-21 years with severe disabilities.//2007//

/2008/It's necessary to clarify that CSHCNP provides case coordination in a limited manner. There are 92 service coordinators for the population under EIP.//2008//

/2007/A toll free number provides information about services and transfers calls to the PCs.//2007//

/2009/The CSHCN Section contracts Data-Voice to provide the toll free number services.//2009//

-Catastrophic Illness program. This program, funded 100% by the state, allows access to very expensive services to individuals with catastrophic conditions. A significant proportion of the patients are children under 21 years of age. They are served either in PR or in the mainland. Around 150 children benefit from the program per year, with costs ranging from 6 to over 7 million dollars.

/2007/ This year 105 children benefited from the program.//2007//

/2008/ This year 104 children benefited from the program.//2008//

**/2010/ During FY 2007-08, 105 children benefited from the program.//2010//**

Population-Based Services: The NTD prevention campaign through the promotion of folic acid consumption among WCBA is conducted with the collaboration of many partners and through a broad array of activities including dissemination of educational materials (posters, pamphlets, etc.) in a variety of settings and integration of the message into the health education curriculum beginning in elementary school.

**/2010/ PR EPSDT guidelines were revised and include screening for developmental delay and autism. //2010//**

Infrastructure Building Services: At this level the CSHCN has the following projects:

-ECCSP pursuing the development of cross-service systems to support children 0-5 years to be healthy and ready to learn. A State Interagency Planning Committee supports the project.

/2007/A Strategic Plan has been completed including its four basic components.//2007//

/2008/ECCSP was transferred to the MCH Division.//2008//



-UNHSP, in the implementation phase. Currently, 19 hospitals conduct hearing screening regularly.

/2008/ By June 2007, 30 out of 40 birthing hospitals are conducting screenings and entering data into the tracking system.//2008//

**/2010/ During 2008, 38 of 40 birthing hospitals entered data into the tracking system and 39 audiologists were registered in CANU Online.//2010//**

-Addressing asthma from a public health perspective. The CDC supports this project.

-Congenital Anomalies Registry, supported by CDC, tracks 13 categories of conditions.

/2008/-BDSS tracks a total of 43 birth defects.//2008//

**/2010/ BDSS now tracks 44 birth defects.//2010//**

-PININES. In collaboration with the Medicaid program, all children are screened for 13 chronic conditions at the time of certification for the GIP.

/2007/A Title V Committee with participation of families and key stakeholders has implemented a plan to achieve CSHCN PMs.//2007//

/2008/Activities are underway to create a Family Representative position as Title V staff.//2008//

/2009/Due to financial constraints this position has not been created.//2009//

**/2010/ The CSHCNP has identified a parent for the family advocate position and is in the recruitment process.//2010//**

/2009/The contract with HC Consulting to provide billing to HICs for services provided in the PC was discontinued and the DoH has taken over.//2009//

**/2010/ The CSHCNP Research and Evaluation Unit composed of an Epidemiologist, an Evaluator, and an Information System Specialist is in charge of collecting and analyzing data for NPMs 2-6 strategic planning and conducting CSHCN research studies.//2010//**

**An attachment is included in this section.**

## **E. State Agency Coordination**

The needs of the MCH population are multiple and complex. Because of this, there is no public or private agency, program, or community based organization that can satisfy all the needs of the most vulnerable population comprised of women in their reproductive age, children and adolescents. It is therefore imperative to establish appropriate coordination mechanisms among all concerned entities in order to reduce duplication and fragmentation of services and to be more efficient in the utilization of the scarce resources available.

In Puerto Rico, we have in place fairly satisfactory coordination mechanisms among several public agencies and other sectors of the community at the state, regional and local levels. These coordination mechanisms are at both formal and informal levels. The Department of Health has established formal relationships with other state public agencies, local public health agencies, academic institutions, federally qualified health centers and tertiary health care facilities. All of these formal arrangements enhance the capacity of the MCH/CSHCN programs.

This formal coordination is the outgrowth of established laws and executive orders of the Governor, which mandate specific agencies and programs to sit at the table to coordinate certain types of services for the MCH population. There are also memorandums of understanding (MOU) among agencies and programs, which enhance the coordination of services. Other formal

mechanisms, which contribute to the achievement of this goal, are interagency committees, task forces and coalitions, among others. Several of the laws, executive and administrative orders and committees require the participation of consumers.

At this point, we want to highlight some of the laws, executive orders, MOU and committees that enhance the provision of health services and coordination among all concerned entities, which serve the MCH population. The central staffs of the MCH/CSHCN programs are regular members of most of these arrangements.

#### General Public Policy:

\*Law No. 72 enacted on September 7, 1993 mandated the establishment of a Health Care Reform which includes a GIP for all individuals under 200% of poverty line. Under this law ASES was created. ASES is responsible for negotiating and awarding contracts to private insurers to provide services included in ASES standard benefit packages.

\*Law No. 194, August 2000: To establish the Patient's Rights and Responsibility.

\*Law No. 408, October 2000: To establish the needs for prevention, treatment and rehabilitation in mental health, and to create the Bill of Rights of adults and minor patients.

/2008/ "Puerto Rico en Forma" (PR Fitness Program) is a collaborative effort established by two executive orders issued by the Governor of PR. It integrates municipal government and central government agencies efforts to increase physical activity and promote healthy eating habits in order to reduce obesity in PR. These Executive Orders are:

\*Executive Order No. 2006-33: to create the "Puerto Rico en Forma" Program and to establish its functions and objectives.

\*Executive Order No. 2006-34: to authorize the use of funds for the "Puerto Rico en Forma" Program from the Salary Incentives Law of the PR Department of Labor and Human Resources.//2008//

#### Public Policies Concerning Women of Reproductive Age and Infants:

\*Law No. 84 -- Enacted in 1987. This law mandates the Department of Health to create the Hereditary Diseases Program to detect, diagnose and treat children with Hereditary Diseases. It requires that every infant born alive in PR must be screened for PKU, hypothyroidism and sickle cell anemia. Currently, two other conditions are routinely screened: galactosemia and congenital adrenal hyperplasia. In addition, the Law requires the establishment of the Council for Hereditary Diseases of PR. The council is integrated by four (4) licensed physicians; one (1) representing the Secretary of Health; one (1) parent of an affected child; and one (1) member should represent programs of continued education for health professionals. Among its responsibilities, the council will recommend the type of conditions to be screened and the kind of diagnostic tests to be used by the Program of Hereditary Diseases of PR. This law is under revision of the Legislature in order to increase the number of conditions to be screened.

\*Law No. 27 -Enacted on July 1992, allows health care professionals to provide prenatal care and postpartum services to minors without parental or guardian consents.

\*Law No. 70 - Enacted on August 1997. It mandates the Secretary of Health to establish a committee charged with the responsibility to develop studies and provide recommendations for the reduction of infant mortality. The law requires an interagency committee including ASES, comprised of nine members under the leadership of the MCH Director.

/2008/ The Infant Mortality Committee, required by law, composed of public and private stakeholders and chair by the MCH Director, has been established to develop a plan of action and provide recommendations to decrease infant mortality in PR. The Plan of Action would integrate recommendations from the March of Dimes Preterm Task Force. The MCH Division is

actively participating in this task force. //2008//

***/2010/ The Fetal Infant Mortality Review (FIMR) Committee met for the first time on June 23, 2009.//2010//***

\*Administrative Order 129, enacted on July 29, 1998 - To establish regulations for all health professionals through continuing education, requiring at least 3 CME credits on the subject of breastfeeding at the time of re-certification. This strategy is aimed at increasing the knowledge and promoting positive attitudes of health providers towards breastfeeding as a means of educating and encouraging breastfeeding in the community. A Steering Committee was organized, consisting of 11 partners from several private and public entities, such as MCH Division of the Department of Health; La Leche League; Department of Education; MCH Health Division of San Juan (Capitol City of Puerto Rico); WIC Program; LACTA Project; Department of Family Affairs; and community advocates. This committee developed a 5-year plan with the purpose of reaching the year 2010 objectives related to breastfeeding and includes the enforcement of Administrative Order 129 through a collaborative effort with the professional boards regulating the individual health practices. This Order also promotes 24-hour mother and child rooming-in in the hospital setting as a strategy to enhance breastfeeding and the well being of the mother and her infant. The Administrative Order has promoted several laws that protect and enforce the rights of all mothers to breastfeed their babies. These laws have been enacted recently as a result of the continued efforts of this committee as well as other breastfeeding advocates in the community.

***/2010/ Administrative Order 129 was repealed by the then Secretary of Health in 2004 considering that breastfeeding CME credits should not be forced to all health professionals for recertification.//2010//***

\*Law No. 32 -Enacted on January 10, 1999. To establish areas designed for breastfeeding and change diapers for young children in malls, government centers, ports and airports.

\*Law No. 427 - Enacted on December 2000. To require that working breastfeeding women be allowed 30 minutes per day to express their milk.

/2008/Law No. 239 of November 2006: This law amends Law No. 427 of 2000 to increase to one hour the time working moms have for breastfeeding or milk extraction at their work settings.  
//2008//

\*Law No. 311 - A legislative mandate for newborn hearing screening is in place since December 19, 2003. Coverage for screening and audiological diagnostic testing is required for all health insurance plans in Puerto Rico.

\*On March 13, 2004, Puerto Rico enacted Law 79 aimed at prohibiting the administration of any breast milk substitute to newborns without the written consent of the mother. Any institution that violates this law will be fined.

\*Law No. 95, enacted on April 23, 2004, prohibits discrimination against women who breastfeed in any public setting.

\*Healthy Start Consortium and Advisory Board to the MCH programs. Currently, it is comprised of about 40 members who represent public agencies including the Department of Health, academia, community based organizations, Medicaid, ASES, WIC, consumers, etc.

\*Committee for the Promotion of Folic Acid Campaign - includes the Department of Education & Puerto Rico's chapter of March of Dimes among its members.

\*Advisory Board of the Midwife Training Program of the School of Public Health - The MCH

Director is an active member.

/2008/ Law No. 156 of August 2006: This law protects women's right during delivery, birth and postpartum period, such as, having someone to accompany her during the delivery process, being informed of the surgical procedures that may be available or necessary, benefits of breastfeeding, and vaginal delivery as her first choice if no complications arise, among others.//2008//

/2009/ \*Preconceptional Health Committee: The committee has representatives from ACOG, the MCS Medical Health Insurance Company, Healthy Start, WIC, Birth Defect Registry staff, midwives and MCH Division staff. The Committee is developing a pilot project directed at improving the interconceptional health of women with diabetes in the western area of PR. It will be directed at postpartum diabetic WIC participants and diabetic WCBA enrolled in the MCS medical insurance company. Participants will receive four educational interventions which will be provided by staff from WIC, MCS, MCH and the Auxiliary Secretariat for Health Promotion.

\*A Collaborative Agreement between MCH and the PR Department of the Family allowed us to provide them with the technical assistance they needed to replicate our HVP model in two regions. MCH and HS staff have trained them on our home visiting procedures, risk assessment tools and shared with them our HVP manual and data entry forms. They will provide services to women in municipalities where we currently lack a HVN, and will serve primarily new cases in which there is strong suspicion of family violence, sexual abuse or that are already under child protective services. We will share training, data and educational materials. Regular meetings will be held between the two agencies to monitor the progress, identify and solve problems and identify areas for further collaboration.

\*A collaborative agreement between the MCH Division and ASSMCA has been signed. It includes active participation in each other's Advisory Committees and the sharing of data, trainings and educational materials.

\*Prematurity Taskforce: This taskforce is sponsored by March of Dimes. Among its members are representatives from AAP, ASES, Academia, Hospital Administrators, House of Representatives, MCH, NGOs and parents of preterm infants. It has several active subcommittees which are focusing their attention towards educating the public, providers and investigating risk factors associated with PR's high preterm rate. MCH is helping the taskforce in their investigative efforts.//2009//

**/2010/ \*Committee for the Review of the Preventive Health Guidelines for Women of Reproductive Age: The committee has representatives from ACOG, the College of Physicians of PR, the PRHIA, Healthy Start and MCH Staff, among other prominent concerned stakeholders. The purpose of the committee is to review the current PRDoH perinatal guidelines to update and expand them to cover all aspects regarding preventive health measures and services for women of reproductive age. The Committee held its first meeting in May 2009.**

**\*Law No. 79, June 2008: Mandates stores that sell alcoholic beverages to post an advice of the effects of alcohol in women of reproductive age and the risk for fetal alcohol syndrome. The MCH program collaborates with the Institute of Developmental Deficiencies of the School of Public Health of the University of Puerto Rico and other key stakeholders in a committee aimed at preparing the Action Plan to comply with this law.**

**\*Executive Order 2008-40 of Aug 2008: This Order creates a commission to address the increasing trend of C/S deliveries in Puerto Rico. As a result, an Administrative Order was issued by the Secretary of Health in Dec 2008 to establish a public policy to reduce the occurrence of C/S procedures while promoting vaginal deliveries in the Island. The former as well as the new MCH Director, both obstetricians, collaborated in the development of**

***the public policy document.//2010//***

Public Policies Concerning Children and Adolescents:

\*Law No. 25 -- Enacted on September 1983 requires complete immunization as established by the DoH to all preschool, school age children and university students at the time of enrollment.

\*Law No. 259 -Enacted on August 31, 2000. To establish an Emergency Medical Service System for Children Program for the prevention and surveillance of pediatric emergencies. The law assigns \$100,000.00 per year for the implementation of the program. This legislation will allow the sustainability of the EMSC program granted by the federal government.

/2008/ The EMSC Advisory Committee mandated by law is composed of nine members from public agencies, hospitals, 911 services, health professionals and community members. Two Title V staff members participate in the Committee: the MCH Director, who chairs the Committee, and the Health Educator, which is the Healthy Start Project Coordinator.//2008//

\*Law No. 296 - Enacted on September 1, 2000. This law mandates a medical evaluation according to EPSDT standards for all children enrolled at day care centers, Head Start programs, and private and public schools on an annual basis.

\*Administrative Order 158, enacted on September 13, 2000 - To establish regulation for training in Comprehensive Adolescent Health.

\*Law No. 177 enacted on August 1st, 2003: For the comprehensive protection and well being of childhood. It requires coordination (Art. 6) among the Department of the Family, Department of Education, Department of Health, AMSSCA, Housing Department, Justice Department & Police Department, among others.

\*PR Safe Kids Coalition - Includes public agencies such as DoH, Department of Education, the Police Department, Fire Department and many non-governmental community agencies and individuals.

***/2010/ SKC lost their financial support and will not be able to continue conducting their activities.//2010//***

/2009/\*Law 107, August 10, 2007 requires a special license for those who drive motorcycles. It requires taking a written exam, receiving a special training provided by a licensed instructor, becoming certified and then taking a road test. To drive a motorcycle a person must be 18 years of age or older, wear a safety approved helmet and follow a dress code. This law prohibits carrying passengers that are younger than 12 years of age.

\*Collaborative efforts are ongoing with the Public Health Emergency Response Preparation and Coordination Office. They have trained 30 of our staff in the Incident Command System and provided them with a curriculum specially prepared to train public health professional on how to respond in different emergency situations. MCH staff has been participating in their table top and full scale exercises. With their assistance the MCH Emergency Response Plan and COOP plan have been prepared.

\*A collaborative effort has been ongoing between MCH and WIC. The MCH Division biostatistician, epidemiologist and evaluators provided the WIC program TAs to help them design and evaluate a weight control intervention program. In turn, they provide us their nutritional expertise as we design questionnaires to identify risk factors associated with obesity. In addition, we share data and trainings.//2009//

***/2010/ An MOU was signed in April 2008 by the Administration of Mental Health and Anti-Addiction Services (ASSMCA, Spanish acronym) and the MCH Division to share direct***

***database from the Monitoring the Future survey (Consulta Juvenil, Spanish name) which measures risk behaviors in adolescents attending schools. This data will enable the MCH-SSDI project to perform additional in-depth analysis of high risk behaviors among adolescents such as tobacco, alcohol and drug use, and premature sexual activity, among others.//2010//***

\*During 2004, interagency agreements with the Department of Family and the Early Head Start consortium's were revised and updated. Inter-agency steering committees were implemented for the UNHS and ECCS programs.

\*Law No. 220 -- Enacted on August 21, 2004 to establish the Bill of Rights for pregnant teens enrolled at public schools.

\*COPRAN -- It is the Puerto Rican coalition aimed at preventing underage drinking. This aim is pursued through a wide array of activities which include lobbying for appropriate legislation. The MCH program has a formal collaborative agreement with COPRAN.

/2007/ Funds to continue this program are no longer available.//2007//

/2007/ Law 66 enacted on March 2, 2006. This bill eliminates tobacco use in bars, casinos, and other workplaces, as well as in private cars with children under 13 years old aboard. It makes Puerto Rico the 13th U.S. state/district/territory to go smoke-free. //2007//

/2008/ On March 2, 2006, Law No. 40, the Law to Regulate Smoking in Public and Private Places, was amended by Law No. 66. This comprehensive law aims to protect the non-smoking public from the harmful effects of environmental tobacco exposure, as well as to increase awareness of the health consequences of smoking. It prohibits smoking in all public spaces, including workplaces, businesses, schools and universities, day care centers, private vehicles when a child under age 13 is a passenger, restaurants, cafeterias, bars, pubs, convention centers, parks, and almost all private and public spaces. Exceptions are made for businesses that are dedicated exclusively to the sale of tobacco products, private homes, and hotel rooms designated as smoking. //2008//

/2009/ Law #21, signed 2/29/2008, requires all health insurance companies to cover smoking cessation methods and products for their enrollees. This is a major step in PR continuing efforts to decrease smoking. It will take effect in July 2008.//2009//

/2007/ The Puerto Rico Penal Code was amended. This reform will have an impact on some of the indicators related with adolescents. For example: the age when an adolescent female can consent to have sexual relations has been increased from 14 years to 16 years. This change limits the services that can be provided to a sector of the adolescent population.//2007//

/2009/\*Primary Care Association and 330 clinics are participating in the ABCD Screening Academy pilot project that will promote the medical home model and implement the use of a developmental screening tool (ASQ).

\*The Juvenile Correction Administration is collaborating with the MCH Adolescent Program (SISA) in the implementation of the youth promoters program in two of their juvenile detention centers.

\*Title X clinics, federally qualified health centers and PROFAMILIA, an NGO that specializes in reproductive health issues, have been providing family planning services to some of the GIP participants we have not been able to serve due to our limited fiscal resources.

\*\*"Alianza Niños y Jóvenes Activos, Saludables y Bien Nutridos". This alliance was established in December 2007 with the purpose of educating the public on issues of nutrition and physical

activity in children and youths, establishing a public policy that would support local efforts to reduce the obesity epidemic, establishing a surveillance system and conducting research to identify risk factors associated with the condition. Among its members are representatives from the Departments of Agriculture, Labor, Housing, Education, Health, Sports and Recreation, AAP, Insurance Commissioner, Commission on Nutrition, WIC, College of Nutritionist, University of PR, School of Public Health and communication experts, among others.

\*The UPR Medical Sciences campus has established an MCH Oral Health Clinic that will only treat pregnant women and young children. Their staff will train community dentists in techniques to treat them in their private offices. Our HVN will also be trained on appropriate dental health interventions for pregnant women and young children.//2009//

#### Public Policies Concerning CSHCN:

\*Administrative Order No. 95 - The Metropolitan Pediatric Center was integrated to the University Pediatric Hospital to maximize its administrative functions and to better serve the special needs population. Normatively, the Pediatric Center responds to the Division of Habilitative Services. /2008/ The Division of Habilitation Services is now the Section of CSHCN.//2008//

\*Law No. 51- This law was enacted on June 7, 1996. It mandates the provision of comprehensive educational services to individuals up to 21 years of age who have special educational needs. The law requires the establishment of an Advisory Council. An outstanding responsibility of the Department of Health under this law is to screen all children born in PR in facilities of the DOH or privatized, for developmental delay during the first three months of age. Identified children will be referred to the Early Intervention Program (EIP) with parental consent for eligibility determination and for provision of services until age 3 years. This strategy will assist the program to increase the number of children identified and enrolled during the first year of age. From ages 3 to 21, the Department of Education is ultimately responsible for providing educational and related services and the required coordination with six other agencies.

/2007/ Collaboration with the Federally Qualified Health Centers (Section 330 of the federal Public Health Act) has been increased. Title V and the administration of the 330 Centers share data on topics related to MCH issues. Personnel of the MCH Division also served as resources for Continuing Medical Education activities sponsored by the 330 centers.//2007//

/2007/ \* Law No. 56 - In 2005, PRDoH and the Asthma Coalition impelled the creation of "Law for the Treatment of Students with Asthma". This law, signed on February 1, 2006, recognizes the right of students with asthma or other related conditions to self-administer medications in school with the consent of their parents or guardians.//2007//

/2008/Law No. 238 (2004) - Bill of Rights for Persons with Disabilities to adopt public policy to address the needs of persons with disabilities.

Law No. 103 (2004) - Bill of Rights of Children and Adults with Autism to establish a comprehensive system of protection for persons with Autism including medical services, education, physical, social and psychological rehabilitation.

RC No. 289 (2006) - orders the PRDOH to establish a Register for Children and Adults with Autism. //2008//

\* Law No. 318 -Approved on December 2003 designates the PRDoH as responsible for developing and implementing public policy for the evaluation, management, and registry of children and adults with autism.

/2008/ Law No. 318, amended (Law No. 122, 2006), was implemented to reduce the number of members of the Autism Interagency Committee who has the responsibility of developing a public

policy for the population with Autism and other disorders under the Autism Spectrum. //2008//

/2009/ The Interagency Committee submitted its recommendations to the Secretary of Health in December 2007. The Secretary of Health will submit to the Legislature a proposal that will help establish PR's public policy for the Autistic population.//2009//

***/2010/ The Autism Interagency Committee completed the autism public policy project law, was approved by the Secretary of Health in March 2009 and is currently under evaluation by the Legislature. Committee members, including families, participated in the Act Early Region II Autism Summit Project held on March 2009 in NY to develop a strategic plan to address the needs and services of this population and families.//2010//***

/2009/ \*Law No. 3, 2007: Puerto Rico Assistive Technology Program (PRATP) Law requires UPR-PRATP to implement a permanent program of recycling, leasing and reusing assistive technology equipment in coordination with other government agencies. The purpose of the law is to increase access to AT devices and services for persons with disabilities.

\*A project of the House of Representatives (P.C. 4230) was proposed to hasten the purchase and acquisition of AT devices for persons with disabilities. Agencies involved include Department of Education, Department of Health and Vocational Rehabilitation.//2009//

\* Law No. 351, September 2004: To establish a Birth Defect Registry at the PRDoH. This law requires that all providers and agencies which come in contact with cases of birth defects must report them to the Department of Health regardless of gestational age. The Birth Defects Surveillance System program is responsible for developing protocols for an active surveillance system and to establish a data bank to allow research on contributing risk factors to birth defects. The principal objectives of this law pursue the determination of incidence and prevalence rates of selected birth defects in PR, develop prevention strategies, promote early referrals of identified cases to available services and promote the collaboration among the public at large and private partners concerned with this issue.

/2008/The regulations for the Law No. 351 of September 2004 were developed and approved by the DOH Legal Services in June 2006.//2008//

/2007/ Law No 56 - February 2006. Law for the Treatment of Students with Asthma While in School.

\* Advisory Council of Special Education to the Secretary of Education - The CSHCN director represents DOH.

\* State Council on Developmental Disabilities - The CSHCN director represents the Secretary of Health.

\* The PR Asthma Coalition implemented in 2000 to reduce morbimortality due to asthma in Puerto Rico. The Director of Pediatric Pulmonary Program is the president.

/2008/A new director was elected for the PR Asthma Coalition//2008//

\* Committee of the University Affiliated Program (UAP) -- Includes consumers.

/2007/ Its name has changed to Centers of Excellence. The DoH is a member of the Alliance for Full Participation. The alliance is developing a plan to support full participation of people with disabilities in daily activities.//2007//

/2008/ The plan to support full participation of people with disabilities was presented in Washington and is being implemented. The main priority of the Committee was to review the Bill



of Rights for Persons with Disabilities; recommendations for amendments were submitted to the Legislature.//2008//

\*United Funds of PR - CSHCN director participates with other representatives of the community.

/2007/ The SECCS Task Force is collaborating with the Legislature to develop public policy for children ages 0-5 and families.//2007//

/2007/ A needs assessment of persons with autism spectrum disorders is under way. Once completed, it will contribute to the development of public policy. It is sponsored by CDC.//2007//

/2008/ The data collection phase for the needs assessment of persons with autism spectrum disorders was completed; CDC sponsoring ended in September 30, 2006. An epidemiologist was contracted for the analysis and reporting phases of the PR First Autism Spectrum Disorders Report. This study will provide baseline data for the implementation of an Autism Registry at the PRDoH. //2008//

/2009/ The Autism Registry is being implemented by the PRDoH, State Epidemiologist Office. The needs assessment study conducted to obtain information on persons with ASDs revealed a male to female ratio of 4.95 to 1. Most of the parents (88.7%) reported that children were receiving special education services through an IEP. Parents reported observing for the first time an unusual development in the child at the age of 24 months. The median age for initial diagnosis was 36 months.//2009//

/2009/ \*Law No. 125, 2007: The law that created the Health Services Administration of Puerto Rico (ASES) was amended to provide medical equipment and nurse specialist home visits for children 0-21 years of age on chronic ventilation via tracheostomy.//2009//

**/2010/ \*Law No. 176, August 2008: Law to Improve Access to Essential Services for People with Severe Disabilities 21 years and older.**

**\*Law No. 259, August 2008: to amend Bill of Rights for Persons with Disabilities to assure equal access to public and private programs and services for persons with disabilities.**

**\*HR No. 1322 bill, March 2009: for the development and implementation of an autism public policy.//2010//**

/2007/ In 2005, a MOU between DoH and ASES was signed. It will allow us to remove barriers associated with access to services for CSHCN that have been identified through the "Champions for Progress Center" Initiative. The main goal of this grant was to provide leadership for the development of a system of services for CSHCN. Families, providers and representatives from the health care insurance companies participated in the initiative. Together they established three common objectives: 1) Educate stakeholders on the development of Systems of Care for CSHCN, including six CSHCN (MCH) core outcome measures; 2) Develop collaborative strategies to establish partnerships; 3) Develop a list of reimbursement codes. Other grant recommendations were included in the Title V action plan.//2007//

/2009/The University of Puerto Rico Institute for Developmental Deficiencies will provide TA and trainings to HVN on the administration and interpretation of the ASQ questionnaire.//2009//

## **F. Health Systems Capacity Indicators**

### **Introduction**

**/2010/ The analysis and objective evaluation of the health situation, evidenced based decision making and the development of strategies to promote optimal health among our people depends on the accessibility of information based on appropriate, dependable**

*data. Mechanisms have been set along the way to obtain the needed information from DoH programs and other agencies that serve and gather data on the same target population. DoH programs such as Medicaid, Immunization, WIC, PRHIA, Oral health, Genetic Counseling Clinics, Catastrophic Illness Office and Pediatric HIV, among others, share important data with the MCH Division. Other programs that collaborate in this task are the Newborn Screening for Hereditary Diseases, DOE, Department of the Family, Department of Transportation, Police Department, EMCS and the Head Start Program. We seek new data sources and work towards linking this information into a child electronic record. Also, we disseminate our information to guide program development, evaluation and public policy development. To achieve this purpose, we will publish an MCH Data Book during this period.*

*Health care insurance has continued being provided in PR for people with incomes below 200% SPL, despite the economic crisis the Island faces. Our efforts are directed at assuring that all those holding the GIP receive the services included in the health care package, following the standards of care established by the DoH. We concentrate our main efforts on target areas such as reducing asthma (burden) complications, improving oral health, EPSDT compliance, adequacy of PNC, eligibility in Medicaid and SCHIP programs of children and women, and reducing tobacco use among adolescents to improve our systems capacity to serve GIP holders and improve their health status.//2010//*

**Health Systems Capacity Indicator 01:** *The rate of children hospitalized for asthma (ICD-9 Codes: 493.0 -493.9) per 10,000 children less than five years of age.*

Health Systems Capacity Indicators Forms for HSCI 01 through 04, 07 & 08 - Multi-Year Data

<b>Annual Objective and Performance Data</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
Annual Indicator	519.1	683.7	586.9	437.0	294.4
Numerator	13799	17618	14766	10820	7121
Denominator	265820	257697	251604	247624	241858
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Final	Provisional

**Notes - 2008**

For source of information refer to 2006 notes.

**Notes - 2007**

Updated data for 2007. For source of information refer to 2006 notes.

**Notes - 2006**

Data for the numerator is preliminary from ASES and OCS since they are still revising the data. The denominator is the annual estimate of the population on July 1, 2006 as reported by the US Census Bureau for Puerto Rico.

**Narrative:**

*//2010/ Asthma is an important health issue in PR. PR's asthma morbidity and mortality is the highest among all the US states and territories. According to the 2007 Behavioral Risk Factor Surveillance Survey (BRFSS), in Puerto Rico, approximately 160,000 children under 18 years old (28.4%) were diagnosed with asthma by a health professional at any time in their life. Among them, 13.6 % persisted with asthma. The lifetime and current asthma*

*prevalence seems to be higher in Puerto Rican children than in children in the United States. Childhood asthma seems to be more prevalent in males than in females. During 2007, there were three (3) asthma related deaths among children 1-14 years old. However, in 2008, there were no asthma related deaths.*

*Although it is difficult to scientifically prove any direct correlation between the State Asthma Plan interventions and the decrease of asthma hospitalizations. It is important to mention that since 2003, a series of efforts and interventions have been initiated by the Puerto Rico Department of Health through the Asthma Plan, the Puerto Rico Asthma Coalition, pharmaceutical companies and other asthma collaborators to reduce the asthma burden in Puerto Rico.*

*The Puerto Rico Department of Health, faced with this asthma burden, established an asthma project subsidized by the Centers for Disease Control and Prevention (CDC) to reduce asthma morbidity and mortality. This project has been able to develop and successfully maintain the PR Asthma Surveillance System (PRSS), and to establish working committees with PR Asthma Coalition members. Together they were able to elaborate the State Asthma Plan (SAP), a keystone for the control of the asthma burden in PR.*

*The SAP is divided into 7 focal areas: Partnerships, Surveillance, Health Promotion / Education, Public Policy, Environment, Access to Health Services and Evaluation. Their work plans, activities and interventions are modified and carried out based on the needs and priorities the PRAC and the PRSS identify. Currently our main intervention priorities are to train primary care physicians (PCPs) and health professionals in the use of the National Asthma Education and Prevention Program (NAEPP) asthma treatment guidelines and to develop public policy implementation to assure access to asthma control medications for children 0-17 beneficiaries of the GIP. During the periods of 10/06 to 11/06, 9/07 to 11/07, and 8/08 to 9/08 the Asthma Project (AP) has offered six (6) adult and fifteen (15) pediatric asthma management trainings to PCP groups and other health professionals. The municipalities with higher rates of asthma morbidity and mortality according to the Puerto Rico Asthma Surveillance System (PRSS) were selected as sites for these trainings. A total of 1,024 health professionals participated in them. They were very well attended, since 88% of those that pre registered did attend.*

*The Asthma Project (AP) and the Puerto Rico Asthma Coalition have identified that one of the most significant barriers towards achieving asthma control of moderate to severe asthmatics is the underutilization of long-acting asthma medications in the management of their condition by the GIP providers. It is believed the elevated costs of these asthma medications is adversely affecting providers' capitation and thus discouraging them from prescribing them according to the established guidelines. Therefore, Administrative Order #248 was signed to improve accessibility to these medications.*

*The MCH Division continues improving and implementing the SAP to help the PRDoH meet the Healthy People 2010 objectives for Focus Area #24 of Respiratory Diseases and to monitor progress regarding Title V performance measures and asthma related indicators.//2010//*

**Health Systems Capacity Indicator 02:** *The percent Medicaid enrollees whose age is less than one year during the reporting year who received at least one initial periodic screen.*

Health Systems Capacity Indicators Forms for HSCI 01 through 04, 07 & 08 - Multi-Year Data

<b>Annual Objective and Performance Data</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
Annual Indicator	12.1	57.9	70.8	91.7	91.5

Numerator	2949	14051	15489	15770	18678
Denominator	24374	24269	21886	17191	20419
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Final	Provisional

#### Notes - 2008

Data represents the GIP sector only. It was provided by the Health Insurance Administration.

The GIP eligible population for 2008 was 1,461,005 and 27,953 were infants. This represents 1.9% eligible infants. On the other hand, the GIP insured population was 1,412,195; of these, 25,195 were insured infants. These infants correspond to 1.8% of the total GIP insured population. The data show that children less than one year old represent about 1.9% of the eligible population and 1.8% of the total insured population.

Based on the assumption that Medicaid funds in PR are used exclusively to pay for services targeted at the population below 100 SPL, it can be said that the eligible population below 100 SPL were 1,074,707 and those insured were 1,037,644. Therefore, the eligible infants below 100 SPL were 20,419 ( $1,074,707 \times 0.019$ ) and the insured infants were 18,678 ( $1,037,644 \times 0.018$ ).

#### Notes - 2007

Updated data for 2007. For source of information refer to 2006 notes.

The children less than one year old represent about 1.6% of the eligible population and 1.5% of the total insured population.

Assuming that in PR the Medicaid funds are used to pay the population below 100 SPL, the eligible population below 100 SPL (Medicaid) were 1,023,847 and those insured were 1,106,145. The numerator and denominator represent the 1.5% and 1.6% of children under 1 year old and below of the 100 SPL eligible and insured for the GIP, respectively.

#### Notes - 2006

Data represents the GIP infant population. It was provided by the Health Insurance Administration (ASES).

The numerator is the number of infants who received at least one initial screening service. The denominator is the total number of eligible infants in the GIP for year 2006. Since ASES do not provide the number of Medicaid and SCHIP individually, the reported data includes GIP participants less than 1 year old.

#### Narrative:

*/2010/ Due to its territorial status, Medicaid funds allotted to PR are significantly lower than for the states. Medicaid funds alone are not enough to provide services for all Medicaid eligible children. A combination of state, federal (Medicaid and SCHIP) and local (municipal) funds are used to purchase the Government Insurance Plan (GIP) for low income individuals. For that reason, the health care services provided to these children are covered by the GIP.*

*In FY 2008, Puerto Rico devoted \$1,483.7 million to finance the GIP for persons with incomes below 200% of the State Poverty Level (SPL). During that same period, PR received in Medicaid funding \$216.1 million, 27% more than FY 2007 (\$169.8 million).*

*In addition, the current health care delivery system for this population does not follow the*

*fee for service model and instead uses a capitated managed care system model. Because of this, providers receive a fixed amount of dollars per patient per month to cover all their individual medical expenses and services provided are not itemized or separated according to the funding source.*

*We estimated the number of infants for this indicator using the population below the 100 SPL covered by the GIP. This is the SPL used by the PR Medical Assistance Program to certify as eligible to cover health services mainly through the Medicaid funds. Approximately 1.8% of the total GIP population represents insured infants. The available information led us to hold two assumptions: first the 1.8% represents also the insured infants below the 100 SPL covered by the GIP and, secondly, the services that these infants received are covered exclusively by the Medicaid funds. Based on these assumptions, we estimated that about 18,678 of 20,419 (91.5%) infants received services through Medicaid funds.*

*We maintain contact with ASES to improve the data to obtain this HSCI for Medicaid enrollees exclusively as we attempt to calculate this indicator. Since a new government is in placed, we expect to continue the efforts in order to enhance the information system.*

*The SSDI Program continues to work to ensure the MCH Program has access to accurate, real time data from ASES to monitor this HSCI. In addition, SSDI staff continues to focus on improving the data linkages between birth records and Medicaid eligibility files. According to the 2006 Medicaid eligible -- birth records linkage file, 81% of infants was GIP eligible whose health services could be covered primarily through Medicaid funds.*

*Backed by laws that establish newborn metabolic and hearing screening as mandatory, PR has been able to provide the vast majority of its infants with at least one of the periodic screen included in the EPSDT schedule. One of the most frequent screening tests provided to infants born in Puerto Rico is the newborn metabolic screen. During FY 2007-2008, 45,966 out of the 46,002 registered live births during that time were screened. This figure represents 99.9% of all live births during the reporting year. Preliminary 2008 data indicates that 98% (44,245 out of 45,164) of the newborns delivered were screened for hearing loss.*

*During their daily activities CHW, HVN and perinatal nurses in the eight Health Regions educate parents on the content of adequate pediatric care and encourage them to demand it for their children. Medicaid staff also promotes the same message when they participate in activities and health fairs. During these activities they attempt to identify people without health insurance, enroll them in the GIP and assist them in obtaining adequate care.//2010//*

**Health Systems Capacity Indicator 03:** *The percent State Childrens Health Insurance Program (SCHIP) enrollees whose age is less than one year during the reporting year who received at least one periodic screen.*

Health Systems Capacity Indicators Forms for HSCI 01 through 04, 07 & 08 - Multi-Year Data

<b>Annual Objective and Performance Data</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
Annual Indicator	3.0	57.9	70.8	91.7	91.9
Numerator	731	14051	15489	5403	6742
Denominator	24374	24269	21886	5891	7340
Check this box if you cannot report the numerator because					
1. There are fewer than 5 events over the last					

year, and 2.The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Final	Provisional

#### **Notes - 2008**

Data for 2008 represents the Government Insurance Plan sector only. It was provided by the Health Insurance Administration.

The GIP eligible population for 2008 was 1,461,005 and 27,953 were infants. This represents 1.9% eligible infants. On the other hand, the GIP insured population was 1,412,195; of these, 25,195 were insured infants. These infants correspond to 1.8% of the total GIP insured population. The data show that children less than one year old represent about 1.9% of the eligible population and 1.8% of the total insured population.

Based on the assumption that SCHIP funds in PR are used exclusively to pay for services targeted at the population between 101 thru 200 SPL, it can be said that the eligible population was 386,298 and those insured were 374,551. Therefore, the eligible infants between 101 thru 200 SPL were 7,340 ( $386,298 \times 0.019$ ) and the insured infants were 6,742 ( $374,551 \times 0.018$ ).

#### **Notes - 2007**

Updated data for 2007. For source of information refer to 2006 notes.

The children less than one year old represent about 1.6% of the eligible population and 1.5% of the total insured population.

Assuming that the SCHIP funds are used to pay the population between 101 thru 200 SPL, the total eligible population was 350,825 and the total insured population was 379,025.

The numerator and denominator represent the 1.5% and 1.6% of children under 1 year old between 101 thru 200 eligible and insured for the GIP, respectively.

#### **Notes - 2006**

Data represents the GIP infant population. It was provided by the Health Insurance Administration (ASES).

The numerator is the number of infants who received at least one initial screening service according to the EPSDT. The denominator is the total number of eligible infants enrolled in the GIP for year 2006. Since ASES do not provide the number of Medicaid and SCHIP individually, the reported data includes GIP participants less than 1 year old.

#### **Narrative:**

*/2010/ SCHIP Program benefits became available to PR in 1998. This Program allows States and territories to choose from three different options to expand medical insurance coverage to uninsured children who do not qualify for Medicaid benefits. These are: establishing a new independent children's health insurance program, expanding current Medicaid Programs, or a combination of both strategies.*

*The PR Medical Assistance Program considers children whose families' incomes are above 100% SPL but below the 200% income level to use primarily the SCHIP funds. Infants may be considered eligible for the GIP sponsored by SCHIP funds even though their mothers may not be Medicaid eligible. This determination allows infants whose family income is too high to make them GIP eligible to use Medicaid funds but too low to have a private insurance plan.*

*SCHIP funds received during FY 2008 experienced a huge increase compared to those allotted during FY 2007 (\$88.1million vs. \$42.5 million). This increment was possible for the unobligated funds of other years, among others. However, SCHIP funds solely are insufficient to cover the expense associated with providing health services to all SCHIP*

**eligible children. For this reason, state, federal (SCHIP) and local funds (municipal) are combined to finance health care for children with incomes in the 100-200% SPL range.**

**A limitation of merging several funding sources is that claims are not itemized nor separated by funding source. For this reason, we assumed the percent of infants between 101 and 200% SPL covered by GIP as a proxy of infants that use SCHIP funds. In addition, infants with GIP represent 1.8% of the total of insured population. According to this percent, we estimate that 6,742 of 7,340 infants between 101 and 200% SPL received services through the SCHIP funds.**

**The SSDI Program continues to work to ensure the MCH Division has access to accurate, real time data from ASES to monitor this HSCI. In addition, SSDI staff continues to focus on improving the data linkages between birth records and Medicaid eligibility files. These files also include data for SCHIP eligible participants.**

**Backed by laws that establishes newborn and hearing screening as mandatory, PR has been able to provide the vast majority of its infants with at least one periodic screen included in the EPSDT schedule. One of the most frequent screening tests provided to infants born in Puerto Rico is the newborn metabolic screening test. During FY 2007-2008, 45,966 out of the 46,002 registered live births during that time were screened. This figure represents 99.9% of all live births during the reporting year. Preliminary data indicates that 44,245 out of 45,164 (98%) newborns born in 2008 were screened for hearing loss.**

**During their daily activities, CHW, HVN and perinatal nurses in the eight Health Regions educate parents on the content of adequate pediatric care and encourage them to demand it for their children. Medicaid staff also promotes the same message when they participate in activities and health fairs. During these activities they attempt to identify people without health insurance, enroll them in the GIP and assist them in obtaining adequate care.//2010//**

**Health Systems Capacity Indicator 04:** *The percent of women (15 through 44) with a live birth during the reporting year whose observed to expected prenatal visits are greater than or equal to 80 percent on the Kotelchuck Index.*

Health Systems Capacity Indicators Forms for HSCI 01 through 04, 07 & 08 - Multi-Year Data

<b>Annual Objective and Performance Data</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
Annual Indicator	84.2	81.6	81.6	82.7	83.5
Numerator	25799	36810	36816	35648	35694
Denominator	30655	45130	45130	43121	42762
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Provisional	Provisional

**Notes - 2008**

Updated data for 2006 and 2007. Data for 2008 provided by the Office of Informatics and Technology Advances (OITA).

**Notes - 2007**

Updated data for 2007. For source of information refer to 2006 notes.

**Notes - 2006**

The Kotelchuck Index is a composed indicator to measure adequacy of prenatal care. It uses two crucial elements obtained from birth certificate data: the date when prenatal care began (initiation) and the number of prenatal visits until delivery. Data for 2005 is final.

Numerator: data provided by the Office of Informatics and Technology Advances (OIAT) of the PR Department of Health.

Denominator: data provided by the Office of Informatics and Technology Advances (OIAT) of the PR Department of Health.

**Narrative:**

*/2010/ The Kotelchuck Index is an indicator frequently used to determine the adequacy of the prenatal care. It is calculated using three distinct fields: the date of the last menstrual period, the number of prenatal visits (and when they started), and the date of birth. Currently, the MCH Program uses data provided in the birth certificate to calculate the Kotelchuck index.*

*Preliminary 2008 birth certificate data was used to calculate the percent of women 15 through 44 years with a live birth whose observed to expected prenatal visits are greater or equal to 80% on the Kotelchuck Index. The result showed 83.6% of pregnant women fulfilled these criteria. The percent of women with a live birth during 2008 that had an adequate or adequate plus prenatal care according to the Kotelchuck Index increased with age. It was 54.8% for the 10 to 14 years age group, 75% for those 15 to 17 years of age, 77% for those between 18 to 19 years, 85% for those 20 to 34 years and 86.2% for those 35 years or more.*

*This is one of the 15 health indicators that we analyze annually to determine the Integrated Index of Maternal and Child Health by municipality (IIMCH). This allows us to track the MCH health status by municipality and health region, helping us to identify those sectors of PR that need interventions to consequently improve their health. The data generated is widely disseminated to concerned entities and stakeholders responsible for promoting first trimester admission into PNC and the quality of PNC. During 2007, pregnant women in about 80% of all municipalities (n=62) received adequate or adequate plus prenatal care.*

*Other sources that the MCH Program uses to monitor the adequacy of prenatal care based on the time PNC was initiated are the HVP, WIC and the PRAMS like ESMIPR study. The 2008 ESMIPR study revealed that 91.6% of the participants initiated the PNC during the first trimester of pregnancy. This rate is higher than the one reported by the birth certificate; however the sample of the study is not representative of the entire population.*

*Preliminary birth certificate data for 2008 revealed early PNC rate is 80.4%. We have continued our efforts to promote early PNC admission. Our staff is always on the lookout for pregnant women without PNC. The MCH Program developed the Prenatal Care Card (PNC Card) to ensure that the pregnant women have with them at all times information regarding their prenatal care. In the past there was a uniform PNC card that was provided to the maternal population and the MCH Program wishes to restore this card that will be able to provide this information to ER providers during an obstetric emergency. The PNC Card was submitted to the PR Health Insurance Administration (ASES) for their evaluation. ASES will distribute the PNC Card to all the insurance companies that offer services to GIP participants with the objective to standardize this information among this population.*

*Since the adolescent group has the lowest percentage of adequate PNC, they are being targeted as the number one priority. Pregnant teens are being searched for, guided and supported until they initiate prenatal care provided by an obstetrician. Once they are*



*enrolled in the HVP, nurses visit them regularly and monitor their compliance with the PNC Guidelines established by the PR Department of Health.*

*The MCH Program is constantly carrying out educational interventions where we stress the importance of early and adequate prenatal care as well as compliance with the prenatal care guidelines established by the Department of Health and ACOG. Special emphasis will be given to disseminating information about the early signs and symptoms of pregnancy and the need to request prenatal health care as soon as pregnancy is suspected.*

*During October 2008, the State System Development Initiative (SSDI) trained data abstractors to collect the hospital record information needed for a study to evaluate the impact of the implementation of the 2005 revised birth certificate has had on PNC related VS data used to calculate this indicator. This information has been gathered and we are in the process of analyzing the data. With it we expect to know if the changes in PNC rates are real or an artifact. Once we have several more years of experience with the new birth certificate we will be able to judge if this trend is real and not only due to changes in the data gathering process.//2010//*

**Health Systems Capacity Indicator 07A:** *Percent of potentially Medicaid-eligible children who have received a service paid by the Medicaid Program.*

Health Systems Capacity Indicators Forms for HSCI 01 through 04, 07 & 08 - Multi-Year Data

<b>Annual Objective and Performance Data</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
Annual Indicator	16.5	96.9	95.5	96.7	97.0
Numerator	98891	568857	535239	506826	461764
Denominator	599177	587041	560295	524288	475893
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Provisional	Provisional

**Notes - 2008**

Data provided for this performance measure for the calendar year 2008 was using as numerator the total number of children 1-19 years old who received services through the GIP. The denominator was the number of children 1-19 years of age potentially eligible for the GIP for the corresponding year. The data was provided by the PR Health Insurance Administration (ASES).

**Notes - 2007**

Updated data for 2007. For source of information refer to 2006 notes.

**Notes - 2006**

Data provided for this performance measure for the year 2006 was using as numerator the total number of children 1-20 years old who received services through the GIP. The denominator was the number of children 1-20 years of age potentially eligible for the GIP for the corresponding year. The data was provided by the PR Health Insurance Administration (ASES).

**Narrative:**

*/2010/ During FY 2008, Puerto Rico used \$1,483.7 million to purchase the GIP for persons whose net income was 200% below the State Poverty Level. Medicaid dollars contributed \$216.1 million (14.6%) and SCHIP funds \$88.1 million (5.9%) to the total amount of funds. State and municipal funds were used to cover the remaining costs associated with providing medical insurance to this special population.*

*The Health Insurance Administration (ASES, Spanish acronym) administers the GIP while the Medical Assistance Program certifies participants' eligibility. The information used to report this HSCI comes from the ASES information system database which is based on GIP participants' utilization data. The structure of the ASES database presents difficulties in calculating accurately the number of children who received services paid exclusively by Medicaid funds. Currently, the MCH Program is using the total number of children and adolescents in the GIP as a proxy for Medicaid participants. ASES reports a total of 461,764 children between one and 19 years of age that received services during FY 2008. This represents approximately 97% of all GIP eligible children that received services paid by Medicaid. Paid services include visits to providers, specialists or dentists, hospital visits, laboratories, ambulatory services and pharmacies. It is important to note that not all the parents of children that qualify for the GIP actually enroll them, get their insurance card and access the services included in the benefit package.*

*The SSDI Program has met with ASES to identify ways in which their data collection system can be modified in order to help us obtain more specific accurate information to report for this indicator. Since a new government is in place, we expect to continue the efforts with the new administration in order to enhance the information system.*

*The MCH Program, CHW and HVN are constantly reaching out to infants, children and families without health care insurance and referring them to the Medical Assistance Program to undergo an evaluation to determine eligibility. These professionals referred 250 HVP participants to the Medical Assistance Program.//2010//*

**Health Systems Capacity Indicator 07B:** *The percent of EPSDT eligible children aged 6 through 9 years who have received any dental services during the year.*

Health Systems Capacity Indicators Forms for HSCI 01 through 04, 07 & 08 - Multi-Year Data

<b>Annual Objective and Performance Data</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
Annual Indicator	29.7	36.5	60.3	48.7	18.0
Numerator	87391	52439	64311	54343	35988
Denominator	294373	143580	106721	111501	199542
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Provisional	Provisional

**Notes - 2008**

The numerator represents the EPSDT eligible children aged 6 through 9 years who received any dental services for the year 2008. The denominator represents all EPSDT eligible children aged 6 through 9 years. These numbers was provided by the Health Insurance Administration (ASES, Spanish acronym).

**Notes - 2007**

Updated data for 2007. For source of information refer to 2006 notes.

**Notes - 2006**

The numerator represents the EPSDT eligible children aged 6 through 9 years who received any dental services for the year 2006. The denominator represents all EPSDT eligible children aged 6 through 9 years for the year 2006. These numbers are unduplicated and the Health Insurance Administration (ASES, Spanish acronym) was provided it.

**Narrative:**

*/2010/ Having good oral health is important for the overall health and well-being of children; therefore, monitoring changes pertinent to this measure is a critical function of the MCH Program. During past years, dental caries have been the most common chronic childhood condition reported in Head Start enrollees. For the school year 2007-2008, caries were the most prevalent condition followed in second place by asthma. During that year, 27.1% of the participants had caries and 15.4% had asthma. This represents a decrease from the rates reported for 2006-2007, when 34.0% of the enrollees had caries and 17.9% asthma.*

*In Puerto Rico, all EPSDT eligible children whose family incomes are below 200% State Poverty Level qualify for the medical insurance benefits covered by the GIP. The GIP includes dental benefits for all the children that hold this medical insurance coverage.*

*During CY 2008, ASES reported there were 201,404 EPSDT eligible children ages 6 through 9 in Puerto Rico. Among them, 36,762 received any dental service. This number represents 18.5% of all EPSDT eligible children. There was a reduction of 62% in this HSCI when compared with CY 2007.*

*The MCH Program conducted a study to assess the oral health status of a representative sample (1,995) of third grade students. This evaluation was done in collaboration with the Department's Oral Health Division and the School of Dentistry of the University of Puerto Rico. Results showed that 17% of third grade student had evidence of a dental sealant. Statistically significant differences were identified by insurance plan and school type (private vs. public). The study identified two significant barriers to children's good oral health: 1) Some of the access barriers identified were lack of awareness in the general public regarding this benefit and 2) the reluctance of general dentists to treat young children. MCH has taken several steps to address these barriers. First, we continue disseminating the results of the study among dental and health care providers. Second, in collaboration with the DoH Oral Health Program, a brochure was prepared to disseminate information regarding healthy oral health practices and the dental benefits included as part of the GIP. It was distributed by MCH staff and other collaborators in activities held at the community level. Third, an MCH Dental Health Clinic was established in the PR Medical Sciences Campus. It will provide general dentists the opportunity to have hands-on learning experience on techniques that can be used to manage pregnant women and young children. It is expected that by participating in it, general dentists will be more willing to treat these cases in their clinics. A brochure was developed and distributed to the community in order to promote the Clinic services.*

*During CY 2008, there were 1,266 dentists providing services to GIP participants. However, they are not distributed evenly throughout the Island. About 40% were located in the Greater SJ Metropolitan Area and only 13% provide services to Southwest and Southeastern Regions. We calculate that in the Southeastern Region of PR there are 176 eligible GIP children per dentist and that in the Southwest the rate was 151 children per*

*dentist./2010/*

**Health Systems Capacity Indicator 08:** *The percent of State SSI beneficiaries less than 16 years old receiving rehabilitative services from the State Children with Special Health Care Needs (CSHCN) Program.*

Health Systems Capacity Indicators Forms for HSCI 01 through 04, 07 & 08 - Multi-Year Data

Annual Objective and Performance Data	2004	2005	2006	2007	2008
Annual Indicator	0	0	0	0	0
Numerator					
Denominator					
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.				Yes	
Is the Data Provisional or Final?				Final	Final

**Notes - 2008**

PR does not receive SSI funds. Therefore no data can be reported of this HSCI.

**Notes - 2007**

PR does not receive SSI funds. Therefore no data can be reported of this HSCI.

**Notes - 2006**

PR does not receive SSI funds. Therefore no data can be reported for this HSCI.

**Narrative:**

*/2010/ Puerto Rico does not receive SSI funds. Therefore, no data can be reported for this HSCI./2010/*

**Health Systems Capacity Indicator 05A:** *Percent of low birth weight (< 2,500 grams)*

INDICATOR #05 <i>Comparison of health system capacity indicators for Medicaid, non-Medicaid, and all MCH populations in the State</i>	YEAR	DATA SOURCE	POPULATION		
			MEDICAID	NON-MEDICAID	ALL
Percent of low birth weight (< 2,500 grams)	2008	payment source from birth certificate	13.2	11.2	12.5

**Notes - 2010**

Data obtained from OIAT of the PR Dept of Health. Medicaid percentage represents the population covered by the Government Insurance Plan. Non Medicaid population represents the infants without GIP.

**Narrative:**

*/2010/ Puerto Rico is not able to classify birth weight by Medicaid and Non-Medicaid population. This is mainly due to the way the GIP is financed. Medicaid funds PR receives are capped and not enough to provide all Medicaid eligible population the GIP medical*

*insurance benefit. Therefore, a significant amount of state and municipal funds must be expended to purchase medical insurance benefits for all the population with incomes below 200% SPL. All of this plus the fact that the GIP uses a capitated managed care system model makes it difficult for ASES to separate claims data generated by Medicaid vs. Non-Medicaid population and for us to calculate this HSCI.*

*In order to determine birth weight by income level, the MCH Program uses the GIP participants (those with incomes below 200% SPL), as a proxy of Medicaid participants and Non-GIP for the Non-Medicaid. Information regarding the health plan held by women in Puerto Rico at the time of delivery is collected in the birth certificate.*

*Based on these categories, the MCH Program estimates that the proportion of low birth weight babies (LBW) born to mothers holding GIP card was higher than Non-GIP babies (12.8% vs. 11.2%, respectively). The percent distribution of low-birth weight among Medicaid and non Medicaid infants maintains the same trend as in previous years. It continues to be higher among the Medicaid group.*

*The MCH Division uses other data sources to monitor LBW rates and to identify factors that may be contributing to the increasing LBW rate in Puerto Rico. Among them are the ESMIPR (PRAMS-like), descriptive studies, birth certificates and data linkages between birth and death files. Among those who participated in the 2008 ESMIPR survey, 11% had a LBW infant; 12.7% of the Medicaid participants were LBW compared to 8.6% of the non-Medicaid participants. Furthermore, 2006 Vital Statistics data revealed that LBW rates increased from 10.8% in 2000 to 13.0% in 2006; however, preliminary birth certificate data for 2007 revealed a slight decrease in the LBW rate (12.5%).*

*Preliminary data shows a slight decrease in premature births from 19.9% in 2006 to 19.3% in 2007. Since 2007 the MCH Program has been actively involved with the March of Dimes sponsored PR Prematurity Taskforce (PRPT) activities. This taskforce was established to review available data, identify risk factors that contribute to the increase in PR of the preterm birth rate and recommend a strategic plan to reduce prematurity rates and the mortality and morbidity associated with it. The main objective of the PRPT for this year is to decrease the rate of late preterm births given that about 75% of preterm births are born between 34 to 36 weeks of gestation. The PRPT will develop a massive TV, radio and billboard campaign directed to women of reproductive health, stressing the importance of waiting for the 40th week of gestation to give birth. This campaign will be launched in November 2009 during the Prematurity Awareness and Prevention Day.*

*Efforts to improve these indicators are conducted by the MCH Program. Through the Home Visiting Program, the MCH Program provides case management/care coordination, health education and counseling to pregnant women with complex medical and social risk factors associated with LBW and VLBW infants. The WIC Program also contributes toward reducing these rates by focusing on women who have nutritional risk factors.*

*Since disorders related to length of gestation and fetal growth are the first cause of infant mortality in Puerto Rico, establishing a FIMR will also help us identify some local factors that may be contributing to the increase in LBW. At this time, we are in the process of gathering and reviewing information from several deaths and the first Case Review Committee meeting has been scheduled for June 23, 2009./2010//*

#### **Health Systems Capacity Indicator 05B:** *Infant deaths per 1,000 live births*

INDICATOR #05 Comparison of health	YEAR	DATA SOURCE	POPULATION		
			MEDICAID	NON-	ALL

<b>system capacity indicators for Medicaid, non-Medicaid, and all MCH populations in the State</b>				<b>MEDICAID</b>	
Infant deaths per 1,000 live births	2008	payment source from birth certificate	7.9	6.6	7.5

**Notes - 2010**

Data obtained from OIAT of the PR Dept of Health. Medicaid percentage represents the population covered by the Government Insurance Plan. Non Medicaid population represents the infants without GIP.

**Narrative:**

*/2010/ In PR, state and municipal funds are combined with Medicaid and SCHIP funds to finance the GIP for low-income individuals (below 200% SPL). The MCH Program is unable to differentiate between infants delivered to Medicaid insured mothers from those who were delivered to women whose GIP health insurance was funded with non Medicaid funds. For that reason, the MCH Program uses the GIP participants as a proxy for Medicaid participants when calculating this indicator.*

*In 2008, the infant mortality rate for PR was 6.2 infant deaths per 1,000 live births. For the same year, the Infant Mortality Rate (IMR) for the Medicaid group was 6.5 deaths per 1,000 live births and 4.9 for the non Medicaid group. The preliminary 2008 IMR in PR is under the PR 2010 HP goal of 6.9/1,000 live births. However, it is our experience that these indicators are more likely to change when we report final data. Therefore we will wait until the Vital Statistics database has been revised and information is made official before drawing conclusions based on this evidence. For that reason, we will report 2007 data for this HSCI. SSDI continuously monitors this indicator and its contributing factors by using linked birth and death data files prepared by OIAT. Infant mortality is a sentinel indicator of the existing socio-economic, health and quality of services in the community.*

*Most of the infant deaths occur in the neonatal period (5.9/1,000 live births). The first causes of death for this group are disorders related to length of gestation and fetal growth. Premature births and low birth weight rates decreased by about 2.5% and 3.8% respectively from 2006 to 2007.*

*Collaborative efforts with the March of Dimes PR Chapter will allow us to monitor and disseminate information on IM trends and contributing factors for these two main causes for IM. The MCH Program is actively collaborating with the Puerto Rico Prematurity Taskforce (PRPT) whose main objective this year is to decrease the rate of late preterm births.*

*The MCH Home Visiting Program provides case management/care coordination, health education and counseling to pregnant women with complex medical and social risk factors associated with LBW and VLBW infants. The WIC Program also contributes toward reducing these rates by focusing on women who have nutritional risk factors.*

*The PR Healthy Start Project has taken the lead in planning and implementing a Fetal and Infant Mortality Review (FIMR) project in PR. The MCH Infant Mortality Committee will serve as the Case Review Team for the project. The FIMR Project will begin by reviewing infant deaths occurring in the Mayagüez and Ponce Health Regions, since they have the highest IMR in PR. In June 2008, we received a technical assistance visit by the coordinator of the Contra Costa (CA) FIMR Project. She offered 1 1/2 days of training on bereavement support and maternal interview techniques to our staff. In addition, she was the keynote speaker for the formal launching of the project, which was attended by*

*representatives of hospitals in the project area and other interested parties. In November and December we offered three sessions of a lecture/workshop for hospital nurses and social workers entitled "Managing perinatal and infant loss in the hospital: supporting the bereaved family". The speaker was a psychologist who specializes in grief and bereavement. At this time, we are in the process of gathering and reviewing information from several deaths and the first Case Review Committee meeting was held on June 23, 2009.*

*SSDI continues to share information regarding IM, VS and other MCH indicators with organizations like National Council of La Raza, March of Dimes and the Department of Ob-Gyn of the University of Marshall in West Virginia.*

*The MCH Program staff continues to provide educational interventions directed at HVN, providers and the population at large in order to increase awareness of the elevated LBW PR is experiencing and its implication for these infants' survival. During the activities, staff encourages WCBA to abstain from high risk behaviors such as smoking during pregnancy and offer recommendations to reduce this behavior as well as other factors that contribute to poor outcomes.//2010//*

**Health Systems Capacity Indicator 05C:** *Percent of infants born to pregnant women receiving prenatal care beginning in the first trimester*

INDICATOR #05 <i>Comparison of health system capacity indicators for Medicaid, non-Medicaid, and all MCH populations in the State</i>	YEAR	DATA SOURCE	POPULATION		
			MEDICAID	NON-MEDICAID	ALL
Percent of infants born to pregnant women receiving prenatal care beginning in the first trimester	2008	payment source from birth certificate	76.7	88.3	82.7

**Notes - 2010**

Data obtained from OIAT of the PR Dept of Health. Medicaid percentage represents the population covered by the Government Insurance Plan. Non Medicaid population represents the infants without GIP.

**Narrative:**

*//2010/ PR Medicaid funds are allotted differently than for the states; our Medicaid funding level is capped. In 2008, its funding level was \$216.1 million. Puerto Rico combines state and municipal, Medicaid and SCHIP funds in order to cover the expenses associated with providing medical insurance for those with incomes below 200% SPL. Also, all their individual medical expenses and services provided are not itemized or separated according to the funding source. For that reason we used the GIP insured as a proxy for the Medicaid group to calculate this indicator.*

*Those categorized as non-GIP in the birth certificate usually finance these services using private insurance, self-payment or by receiving pro bono services.*

*On the other hand, we calculated this indicator using the last menstrual period and date of first prenatal visit because the new version of the birth certificate, implemented in 2005, does not collect information regarding the month of pregnancy when prenatal care began.*

*In 2008, 82.4% of births deliveries were from mothers who initiated prenatal care during the first trimester of pregnancy. This represents an increase of less than 1% when compared with the previous year's rate. This increment is similar for both groups, GIP and Non-GIP, although the difference between them continues being statistically significant. Only the Non-GIP population reached the PR Healthy People 2010 goal of 86%.*

*According to the 2008 ESMIPR survey, 96.0% of the births included in the sample received prenatal care in the first trimester. Comparing the results of the 2006 survey, the percent for the GIP and Non-GIP participants remains essentially the same at 90% and 96%, respectively. On the other hand, the gap between GIP and Non-GIP participants is the same comparing 2008 with 2006, the difference between the two groups was 6 points.*

*ESMIPR and birth certificate data are significantly different. A possible explanation for this is the elevated (12%) non response rate in birth record fields that register last menstrual period and date at which prenatal care began. The SSDI Program is conducting a study to evaluate changes in the maternal and newborn health indicators associated with the implementation of the revised birth certificate. The study will attempt to determine if the changes in perinatal indicators are real or secondary to incomplete data in the birth certificate. As part of the study a total of six hundred 2005 birth certificate records will be reviewed and analyzed. Data from these records will be compared to the information registered in the hospital record. The study will allow us to identify incongruence among the two data sources.*

*In 2005, a study was performed to identify the reasons women- who entered prenatal care after the first trimester- gave to explain their late arrival for care. Among the main causes identified were personal barriers (i.e. lack of awareness of pregnancy, psychosocial factors); a combination of personal and system barriers (transportation problems, lack of health insurance coverage); and health care delivery system barriers (the time lapse between requesting prenatal care and the actual admission to prenatal health services).*

*MCH staff being aware of these barriers is constantly watchful for pregnant women, particularly adolescents, without prenatal care. Once a woman is identified, staff must immediately refer her to the PR Medical Assistance Program and to obstetrical providers' offices to ensure they begin their PNC before the end of their first trimester.//2010//*

**Health Systems Capacity Indicator 05D:** *Percent of pregnant women with adequate prenatal care(observed to expected prenatal visits is greater than or equal to 80% [Kotelchuck Index])*

INDICATOR #05 <i>Comparison of health system capacity indicators for Medicaid, non-Medicaid, and all MCH populations in the State</i>	YEAR	DATA SOURCE	POPULATION		
			MEDICAID	NON-MEDICAID	ALL
Percent of pregnant women with adequate prenatal care(observed to expected prenatal visits is greater than or equal to 80% [Kotelchuck Index])	2008	payment source from birth certificate	75.4	85	83.5

**Notes - 2010**



Data obtained from OIAT of the PR Dept of Health. Medicaid percentage represents the population covered by the Government Insurance Plan. Non Medicaid population represents the infants without GIP.

**Narrative:**

*/2010/ As mentioned previously, due to the way in which GIP is financed, the Medicaid cap and the capitated managed care system model adopted by the GIP, it is very difficult for us to differentiate between services provided under Medicaid from those that are not. On the other hand, since GIP is similar to Medicaid in many aspects, the MCH Program uses GIP participants as a proxy for Medicaid participants and Non-GIP for Non-Medicaid participants.*

*The adequacy of prenatal care is measured, as in HSCI 4, as the percent of women (ages 15 through 44) with a live birth during the year whose observed to expected ratio of prenatal visits is greater than or equal to 80% on the Kotelchuck Index. Preliminary 2008 data revealed that 74.5% of Medicaid pregnant women and 84.9% non-Medicaid pregnant women had adequate PNC. Thus, the proportion of pregnant women had received adequate prenatal care, as defined by the Kotelchuck Index, is higher for the non-Medicaid population.*

*According to preliminary results of the 2008 ESMIPR study 95.9% of the non-Medicaid participants initiated the prenatal care during the first trimester of pregnancy compared to 89.8% of the Medicaid population. This rate is consistent with the ones obtained by the Vital Statistics, since the initiation of prenatal care during the first trimester is higher in the non-Medicaid population.*

*The difference among the Medicaid and non-Medicaid population in terms of initiation of prenatal care may be explained by certain barriers in the health care system or in the individual. The lack of awareness of the signs of pregnancy, psychosocial factors, transportation problems, lack of health insurance coverage, time lapse between requesting prenatal care and the actual admission to prenatal health services are among the most common barriers among the non-Medicaid population.*

*The MCH Division developed certain regional activities educating the MCH population in topics such as the importance of prenatal care once pregnancy is known, the importance of early prenatal care and the amount of expected visits during prenatal care. During 2008 the MCH Program offered 122 group activities on the subject of prenatal care impacting 2,273 participants. Also between other activities celebrated regionally, the MCH population received orientation about de GIP.*

*The SSDI Program continues to work to ensure the MCH Division has access to accurate, real time data concerning Medicaid eligible population.//2010//*

**Health Systems Capacity Indicator 06A:** *The percent of poverty level for eligibility in the State's Medicaid and SCHIP programs. - Infants (0 to 1)*

<b>INDICATOR #06</b> The percent of poverty level for eligibility in the State's Medicaid programs for infants (0 to 1), children, Medicaid and pregnant women.	<b>YEAR</b>	<b>PERCENT OF POVERTY LEVEL Medicaid</b>
Infants (0 to 1)	2008	100
<b>INDICATOR #06</b> The percent of poverty level for eligibility in the State's SCHIP programs for infants (0 to 1), children, Medicaid and pregnant	<b>YEAR</b>	<b>PERCENT OF POVERTY LEVEL SCHIP</b>

<b>women.</b>		
Infants (0 to 1)	2008	200

**Notes - 2010**

Data for 2008 provided by the Medical Assistance Program (Medicaid Program).  
The percent of poverty level is a State Poverty Level

**Notes - 2010**

Data for 2008 provided by the Medical Assistance Program (Medicaid Program). Pregnant women do not receive services paid by SCHIP funds.

***An attachment is included in this section.***

**Narrative:**

***/2010/ Due to its territorial status, Medicaid funding for Puerto Rico has been capped since 1968. During FY 2008, PR received \$216.1 million per year. A combination of state and local funds (municipal), Medicaid and SCHIP funds are used to provide services for all low-income individuals through the Government Insurance Plan (GIP). PR has not modified eligibility criteria, despite recent economic hardships and reduced revenues this year.***

***Medicaid funds are used primarily to cover infants whose incomes are below 100% SPL while SCHIP funds are used to provide insurance coverage for children whose income is between 101% and 200% SPL.***

***Infants born of mothers insured by the GIP are automatically enrolled. This automatic enrollment lasts for the first month of life or until the mother returns to be re-certified, whichever comes first. The newborn coverage includes ambulatory services and subsequent hospitalizations if needed.***

***Prior to qualifying a patient, the PR Medical Assistance Program staff evaluates family income sources such as salaries, land, etc., and expenses (alimonies, medical expenses, utilities and telephone bills, etc.). Once this evaluation is concluded, Program staff determines the net income of the person or family according to the defined State Poverty Level (SPL). If the net income for each individual does not exceed \$800 (200% SPL) they will qualify for the GIP. This SPL was set based on cost of living expenses for PR and the family component (see attachment Table III-1 State Poverty Level).***

***Mothers not insured by the GIP must visit one of the Medical Assistance Program for an evaluation to determine if she and their family qualify for this benefit. Those who qualify for the GIP will have their newborns covered for one month. Once this time elapses, the mother needs to be recertified in order to continue to receive the GIP coverage. In some situations where additional income can be documented, family benefits may be eliminated or limited to a three-month period.***

***Newborns may be eligible for SCHIP program even when their mothers do not comply with the Medicaid eligibility criteria. This protects families with incomes too high to make them GIP eligible to use mainly the Medicaid funds but too low to have a private insurance plan.***

***For FY 2008, there were about 27,953 infants eligible for the GIP, a change of 21% more than FY 2007 (23,082).***

***The MCH Program, CHW and HVN will continue reaching out to infants, children and families without health care insurance and referring them to the Medical Assistance Program to undergo an evaluation to determine eligibility. During CY 2008, HVN referred 250 participants to the Medical Assistance Program Offices.//2010//***

**Health Systems Capacity Indicator 06B:** *The percent of poverty level for eligibility in the State's Medicaid and SCHIP programs. - Medicaid Children*

<b>INDICATOR #06</b> <b>The percent of poverty level for eligibility in the State's Medicaid programs for infants (0 to 1), children, Medicaid and pregnant women.</b>	<b>YEAR</b>	<b>PERCENT OF POVERTY LEVEL Medicaid</b>
Medicaid Children (Age range 1 to 18) (Age range to ) (Age range to )	2008	100
<b>INDICATOR #06</b> <b>The percent of poverty level for eligibility in the State's SCHIP programs for infants (0 to 1), children, Medicaid and pregnant women.</b>	<b>YEAR</b>	<b>PERCENT OF POVERTY LEVEL SCHIP</b>
Medicaid Children (Age range 1 to 18) (Age range to ) (Age range to )	2008	200

**Notes - 2010**

Data for 2008 provided by the Medical Assistance Program (Medicaid Program).  
The percent of poverty level is a State Poverty Level

**Notes - 2010**

Data for 2008 provided by the Medical Assistance Program (Medicaid Program). Pregnant women do not receive services paid by SCHIP funds.

**Narrative:**

*/2010/ The Medical Assistance Office is responsible for determining eligibility criteria based on income level. Children living in families whose income is in the 100-200% State Poverty Level range can also get the GIP using SCHIP funds; meanwhile, children with income below 100% use Medicaid funds. A combination of state and local funds (municipal), Medicaid and SCHIP funds are used to provide services for all low-income children through the Government Insurance Plan (GIP).*

*Qualifying income levels are significantly different in PR from those in the mainland. For example, a family of two (mother and child) with a net income of \$990.00 per month is considered to be 200% below the SPL and, therefore, the child would be eligible for GIP sponsored mainly by SCHIP funds. PR has not modified the eligibility criteria, despite recent economic hardships and reduced revenues.*

*SSDI, in collaboration with the OITA, has been linking birth and Medicaid eligibility records. In addition, SSDI is performing a study to estimate the prevalence of uninsured children (0-19 years old) from the 2001-2003 Puerto Rico Health Survey database. Other health information will be obtained in order to measure implications of not having insurance. These indicators are classified as morbidity, hospitalization, school participation and physical activity.*

*The PR MCH staff's main role is to provide information to low income children and their families about the GIP benefits and provide them referrals to the Medical Assistance Offices so they can be qualified to receive the services. HVN and CHW referred 250 HVP participants to the Medical Assistance Offices.//2010//*

**Health Systems Capacity Indicator 06C:** *The percent of poverty level for eligibility in the State's Medicaid and SCHIP programs. - Pregnant Women*

<b>INDICATOR #06</b> The percent of poverty level for eligibility in the State's Medicaid programs for infants (0 to 1), children, Medicaid and pregnant women.	<b>YEAR</b>	<b>PERCENT OF POVERTY LEVEL Medicaid</b>
Pregnant Women	2008	100
<b>INDICATOR #06</b> The percent of poverty level for eligibility in the State's SCHIP programs for infants (0 to 1), children, Medicaid and pregnant women.	<b>YEAR</b>	<b>PERCENT OF POVERTY LEVEL SCHIP</b>
Pregnant Women		

**Notes - 2010**

Data for 2008 provided by the Medical Assistance Program (Medicaid Program).  
The percent of poverty level is a State Poverty Level

**Notes - 2010**

Data for 2008 provided by the Medical Assistance Program (Medicaid Program). Pregnant women do not receive services paid by SCHIP funds.

**Narrative:**

*/2010/ Income levels in PR are significantly different from those in the mainland. For that reason, the Medical Assistance Program has established a State Poverty Level (SPL). The Medical Assistance Program reviews documents with information on family income and expenses to classify the eligibility according to SPL. In Puerto Rico, pregnant women with net incomes 200% below SPL receive GIP sponsored by combined funds, including the Medicaid funds. In the GIP, the obstetrical services are part of carve-out services excluded from the capitated managed care system model. However, in order to qualify for special OB coverage under the GIP, women must provide to the Medical Assistance Program Official a positive serological test confirming the pregnancy. Once they are qualified they are free to choose an obstetrician and make an appointment to initiate their PNC.*

*It is important to note that despite the difficult economic situation, PR has not changed eligibility criteria for pregnant women.*

*On the other hand, the Medical Assistance Program certifies a pregnant woman up to one month after delivery. Subsequently, she will be notified to return for reevaluation in two or six months, depending on the expected changes in family income.*

*In 2005, a survey was undertaken by SSDI to study factors that contributed to women entering PNC late or not seeking care at all. The main reasons these women gave for arriving late were: in first place, being unaware of their pregnant status (64.7%) and in second place lack of health insurance at time of conception (21.1%).*

*Pregnant teens are the group that faces the greatest challenges when attempting to initiate PNC early, since many of them are: unaware of their pregnancy; face financial difficulties when they attempt to get their pregnancy test done; and transportation challenges when they attempt to visit Medical Assistance Program. Since they represent the group with the lowest percentage of adequate prenatal care, they have become our number one priority. Pregnant teens are being searched for, guided and supported until they initiate prenatal care with an Obstetrician.*

*The Perinatal Nurses, CHW and HVN are constantly reaching out to pregnant women without health care insurance and referring them to the Medical Assistance Program to be evaluated and qualified for GIP benefits. However, regardless of their insurance status,*

*they are also helped to initiate PNC care before the end of their first trimester. About 250 HVP participants were referred to the Medical Assistance Program, according to the Home Visiting Program Report./2010//*

**Health Systems Capacity Indicator 09A:** *The ability of States to assure Maternal and Child Health (MCH) program access to policy and program relevant information.*

<b>DATABASES OR SURVEYS</b>	<b>Does your MCH program have the ability to obtain data for program planning or policy purposes in a timely manner? (Select 1 - 3)</b>	<b>Does your MCH program have Direct access to the electronic database for analysis? (Select Y/N)</b>
<u>ANNUAL DATA LINKAGES</u> Annual linkage of infant birth and infant death certificates	3	Yes
Annual linkage of birth certificates and Medicaid Eligibility or Paid Claims Files	3	Yes
Annual linkage of birth certificates and WIC eligibility files	2	Yes
Annual linkage of birth certificates and newborn screening files	1	No
<u>REGISTRIES AND SURVEYS</u> Hospital discharge survey for at least 90% of in-State discharges	1	No
Annual birth defects surveillance system	3	Yes
Survey of recent mothers at least every two years (like PRAMS)	3	Yes

**Notes - 2010**

**Narrative:**

*/2010/ The MCH Program has a staff of public health professionals with expertise in the fields of demography, anthropology, epidemiology, biostatistics and evaluation. This staff monitors changes in the health status of our target population based on the analysis of qualitative data, surveillance system data, linked data sets, and other MCH relevant surveys.*

*The team consists of one Demographer, who is the Coordinator of the Title V Monitoring and Evaluation Unit (TVME) and the SSDI Program, two Epidemiologists, one Evaluator, one Biostatistician, and a cultural Anthropologist. A Pediatrician and an OB/GYN consultant with vast experience in public health provide support to this team. The Ob-Gyn*

**Consultant is now the MCH Director. The TVME Unit reports to MCH Director.**

**In PR, the Office of Informatics and Technology Advances (OITA) is responsible for developing births, deaths and stillbirths files databases. Annually, they provide us with the linked data bases from the birth and infant death files, Medicaid eligible - birth files and WIC participants and birth files. This year we began to link Immunization - birth files. They also offer technical support when database management problems are identified.**

**The SSDI Program is developing an informatics structure that will allow us to collect data in a uniform, ongoing manner. This will facilitate our tracking of the Title V Program indicators.**

**One of the challenges we are currently facing is obtaining Newborn Screening Program (NSP) data files that are compatible with live birth database so linkages can occur and results analyzed. At this time, the NSP are modifying their information system to include other screening tests. Therefore, until this is resolved, birth records and newborn screening files will not be linked.**

**Birth and death files are being linked. The procedure is as follows: once the death certificate reaches the Vital Records Office, their staff verify the child's birth certificate number and writes it on the death certificate. The algorithm, using the SQL program, links the certificates in a two step process: 1) linking by the birth certificate number; 2) by the infant's first and last name and date of birth. This process creates a dataset from which further analysis can be performed on records that were successfully linked. Those records that did not link are still evaluated manually to verify the possibility of a match missed by this procedure. This linkage procedure is able to capture about 99% of the records. For the cohort 2006 the matching was achieved.**

**Since 2004, SSDI Program has electronically linked about 85% of Medicaid eligibility records to live births records. We are reviewing current procedures and contemplating the possibility of modifying them in order to increase successful linking of these two databases to 97% of the cases. At this moment, the matching for 2006 was 89%.**

**Birth Records and WIC eligibility files are being linked. In FY 2009, we met with representatives from the program responsible for the WIC information system and began analyzing their definitions of the pre-defined variables in order to evaluate and determine which variables would be more appropriate for the dataset.**

**The Birth Defects Surveillance System was established in 1995. We are currently matching the medical record information- their abstractors gather with birth records. In 2005, a total of 272 live births were identified as potential matches. After evaluating them, 243 turned out to be matches and 29 cases were identified as new cases not previously identified by the surveillance system. In 2006, 16 of 90 live births had been identified as new cases not previously identified by the surveillance system.**

**PR does not participate in PRAMS; however, we have developed a PRAMS-like survey known as ESMIPR (Spanish acronym). This survey was designed to identify and monitor pertinent perinatal information. This self-administered questionnaire has been administered every two years to a sample of about 1,000 post partum women who had a live birth in one of the hospitals who had had an average of at least 10 deliveries per week in the previous year. This survey was first administered in 2000. ESMIPR data is provided to the program, public agencies and other interested parties who use it as evidence on which to base their decisions and to develop public policies. ESMIPR data is used to report progress on such Title V performance measures as: early prenatal care, breastfeeding rates, unintended pregnancy, nutrition/folic acid awareness, and alcohol and tobacco use, among others. The most recent survey was conducted in 2008.**

Over the years, we have established the mechanisms to get the information we need from other programs of the DoH such as WIC, Medicaid, Immunization, Oral Health Program, ASES, Catastrophic Illness Office and Pediatric AIDS. In addition, relevant information is obtained from the Newborn Screening Program, Genetic Counseling Clinics, Insurance Commissioner, Forensic Science Institute, EMSC, Safe Kids, and the Departments of Police, Education, Family and Transportation.//2010//

**Health Systems Capacity Indicator 09B:** *The Percent of Adolescents in Grades 9 through 12 who Reported Using Tobacco Product in the Past Month.*

DATA SOURCES	Does your state participate in the YRBS survey? (Select 1 - 3)	Does your MCH program have direct access to the state YRBS database for analysis? (Select Y/N)
Youth Risk Behavior Survey (YRBS)	2	No
Monitoring the Future	3	No

**Notes - 2010**

**Narrative:**

//2010/ In Puerto Rico, the Youth Risk Behavior Surveillance Survey (YRBSS) and "Consulta Juvenil" (Monitoring the Future, English name) are used to measure risk behavior in adolescents attending schools. Both surveys gather information of tobacco use in the previous month but we are using data provided by "Consulta Juvenil". Although PR DOE contracts a private entity to do YRBSS biennially it has not been conducted on a regular basis (1991, 1995, 1997, 1999, 2001 and 2005) and in some occasions (1997, 1999 & 2001) the sample size was not weighted. YRBSS was not done in 2007 and 2009 so this valuable tool has been unavailable for its use.

The Administration of Mental Health and Anti-Addiction Services (ASSMCA, Spanish acronym) of the PRDoH hired the Central University of the Caribbean in the Bayamón municipality to conduct "Consulta Juvenil" (CJ) biennially since 1990: CJ-I (1990-91), CJ-II (1992-93), CJ-III (1994-95), CJ-IV (1997-98), CJ-V (2000-2002), CJ-VI (2002-03 to 2003-04) and CJ-VII (2005-2007). It consists of a self-administered survey aimed at a representative sample of elementary, middle and high level students in Puerto Rico's public and private schools. Its purpose is to determine the percentage of students enrolled in 5th to 12th grades who engage in high risk behaviors such as tobacco, alcohol and drug use, and premature sexual activity, among others. It also includes questions directed at identifying the presence of protective and risk factors for these behaviors. The analysis of the data includes information regarding frequency and trends for these high risk behaviors according to age, school grade and sex. "Consulta Juvenil" provides data needed to develop policies and programs directed at the prevention of these behaviors in children and adolescents.

According to the most recently performed CJ-VII (2005-2007), there has been a consistent decrease in the percent of students who report using tobacco products in the past month for each group from 9th to 12th grade in Puerto Rico for the past ten years (1997 to 2007). The last month's tobacco use decreased in: 9th grade from 22.5% (1997) to 5.6% (2007); 10th grade from 25.4% (1997) to 8.3% (2007); 11th grade from 21.8% (1997) to 10.3% (2007); 12th grade from 24.4% (1997) to 11.7% (2007). As in previous years, tobacco use during the past month was higher in middle school males (3.5%) than females (3%) and in high school males (11.5%) than females (8.4%). Although tobacco use in the past month has shown a tendency to decrease, it becomes more frequently used with increasing age in

***both sexes: 5.6% (9th grade), 8.3% (10th grade), 10.3% (11th grade) to 11.7% (12th grade). Half of all students (51%) reported starting tobacco use before 14 years of age. Thirty-eight percent (38%) of high school student reported buying their cigarettes in gas stations (36.3%), supermarkets and small stores (23.4%). Middle school smokers get them from family and friends or purchase (31%).***

***This reduction in the number of students who smoke can be attributed in part to many proactive efforts of several entities including the PR Tobacco Coalition. This multidisciplinary and interagency group has contributed to the enactment of local laws restricting smoking in public places and raising awareness among the population of the health risks associated with smoking. PR Law #40 approved in 2007 makes PR a "tobacco-free island" since it prohibits smoking in public places such as restaurants, cafeterias; centers for health services, child care centers or any public or private place that is used to provide care or health services; bars, pubs, discotheques, convention centers, malls and working places, among others. It is expected that a recently approved law in 2009 to increase taxes to cigarettes will help reduce teen tobacco initiation and consumption in PR.***

***There are government initiatives to prevent smoking initiation in public school settings. The JHPP of MCH SISA Program develop positive youth development peer to peer activities that include tobacco use prevention in middle and elementary schools. MCAH personnel offered 550 activities to 6,102 students about the effects of tobacco, second hand smoke and promotion of healthy lifestyles in 2007-2008. ASSMCA also uses the peer group strategy to prevent smoking initiation in public high school settings. In 2005 the DoH Health Promotion started an Elementary School Initiative "Mi Residencial Libre de Humo" in 6 schools of four of the 5 municipalities of highest early smoke initiation about: tobacco-use health implications, propaganda, smoke cessation and Law #40. An expansion of the project in 2008 added 3 towns. To this date, 500 elementary public school students have had direct benefit from this project and 3,000 indirectly. This project was recognized in 2006 by the UPR Public Health School and has been possible due to government and NGO's collaboration. The 2008 Caribbean Tobacco Control Summit held in PR had experts in the field discussing tobacco prevention topics to health professionals and the general public. A PR 2009 Tobacco Control Summit will be held in November.***

***The newly appointed ASSMCA Administrator has agreed to honor the terms of the MOU signed in April 2008 by ASSMCA and MCH DoH to obtain direct database from "Consulta Juvenil". This data will enable MCH-SSDI project to further analyze teen tobacco use and abuse in PR.//2010//***



## **IV. Priorities, Performance and Program Activities**

### **A. Background and Overview**

The PR MCH needs assessment process is a continuous activity carried out on a year round basis. It is aimed at identifying the specific and changing needs of the different MCH population groups. This activity provides the necessary feedback to readjust the MCH work plan to better respond to changes in health needs of the target population. The needs assessment is geared by the H.P. 2010 national objectives related to the MCH population (Focus Areas 9, 16 and others); national and state performance and outcomes measures, as well as the health status indicators established by the MCHB.

Another complementary activity to the needs assessment is the identification of all activities, services and programs according to the MCH pyramid levels for each of the population groups. These two activities allow us to match MCH health needs with available services and to identify gaps in services that should be filled.

Currently, the Title V program has a section staffed with a well-trained team of professionals whose main task is to gather the most accurate and timely data to monitor the progress of all performance and outcomes measures, as well as the level of progress in improving the health and well-being of the Puerto Rican MCH population.

After that, Title V funds are allocated to complement services, to conduct new activities or to implement new programs that will help us to achieve the established target of performance and long terms outcome measures.

The MCH priorities are determined based on the identified needs, the state capacity to address these needs, the political priorities and input from a broad array of partners including families. The trend analysis for at least five years of the rates of each national and negotiated state performance and outcome measures allow us to set expected targets for future years.

#### **Selection of State Priority Needs:**

A total of ten (10) priority needs were selected based on data analysis, number of persons affected, input from collaborators, state political priorities, availability of resources to address identified needs and reliable culturally sensitive treatment or management options.

The Puerto Rico MCH work plan is focused on the following priorities:

1. Improve maternal health.
2. Reduce unintended pregnancies.
3. Improve newborn health.
4. Reduce adolescent pregnancies.
5. Reduce behavioral risk factors among pregnant women and adolescents (smoking, alcohol and substance abuse).
6. Reduce unintentional injuries among children and adolescents.
7. Increase availability and accessibility to preventive and quality primary health care services for the MCH/CSHCN populations.
8. Decrease morbidity and mortality due to bronchial asthma.
9. Improve coordination among health care plans, primary physicians and the Pediatric Centers.
10. Promote successful transition of youth to adult life.

/2007/ No changes in priority needs were considered for this year. //2007//

/2008/ Priority #10 refers specifically to transition of CSHCN to adult life.//2008//

/2008/Based on our ongoing needs assessment, the state priority needs will be

reevaluated.//2008//

/2009/ During the past three years, the MCH Division has been gathering data in areas related to children's health. We have identified some emerging issues that are affecting the pediatric population and require our prompt attention. Among these issues are the obesity epidemic, oral health, unintentional injuries, asthma, autism, violence, hearing impairments and mental health. This has led us to broaden our priority #3 to include the pediatric population. Many of these areas are already being addressed by the MCH Division with our current programs and activities and reported in the NPM and SPM. Nevertheless, because these are complex issues with multiple associated risk factors, we recognize the need to partner and establish collaborative efforts to address them. Therefore, we will address these conditions by strengthening our PBS and infrastructure building services.

Priority #3 will be modified to read: Improve the health of the pediatric population.

Modify priority #7 to include specialty services (offered by PCs). It will read as follows: Increase availability and accessibility to preventive and quality primary and specialty health care services for the MCH/CSHCN populations.

Modify priority #10 to read as follows: Promote successful transition of youth with special health care needs to adult life.//2009//

***/2010/ No changes in priorities needs were considered for this year. //2010//***

## **B. State Priorities**

Figure IV-1 depicts the relationship among PR's selected priority needs, its capacity and resource capability, the national and State Negotiated Performance Measures and the long term health outcomes set for our mothers, children and adolescents (MCA).

Improving the health status, well being and quality of life of the MCA and their families is a great challenge for the MCH/CSHCN programs. To achieve this goal it is imperative to develop and implement a concerted action plan among a diversity of public agencies, private entities, and CBOs, with the involvement of the families themselves. This is so, because the health status and well being of an individual, or a selected population group, results from the intricate interaction of genetic, environmental and sociodemographic factors. Currently, there is not a single public or private entity with all the resources and capability to address by itself the multiple and complex socioeconomic and health needs of the MCA population. This conclusion is drawn from the comprehensive five (5) years needs assessment of the Puerto Rican MCA population. Their needs are diverse and very complex. The five years needs assessment was performed by means of in-depth analysis of quantitative data collected by the Demographic Registry and the Vital Statistic Office as well as other secondary data sources; by gathering primary and qualitative data; conducting applied research and gathering input through the participation of the MCH/CSHCN staff in hundreds of inter agency meetings, coalitions, commissions, task forces, committees; and through focus groups of different MCA groups. Sadly, this process led us to realize that there is a wide gap between the current MCA health status and well being, and the expected goals set for 2010. In 2003, the IMR was 9.8/1,000 live births compared to the established goal of 4.5/1,000 by 2010. The MMR was 25.5/100,000 live births in comparison to 3.3/1000 by 2010. This ratio is 7.7 times higher than the established goal.

/2008/ In 2005, the IMR was 9.3/1,000 live births compared to the established goal of PR 6.2/1,000 that must be met by 2010. For 2004, according to the Puerto Rico Maternal Mortality Surveillance System, the MMR was 39/100,000 live births in comparison to 6.0 /100,000 to be met by 2010. This ratio is more than 2 times higher than the one reported by the Vital Statistics data (17.6/100,000 live births) for 2004. //2008//

***/2010/ The infant mortality rate in 2007 was 8.3 live births. On the other hand, the PRMMSS reported a MMR of 10/100,000 live births in 2006. VS data set the maternal mortality rate 4/100,000 live births. These two parameters are higher than the established goals for 2010.//2010//***

The contributing (or risk factors) to these poor MCA health outcomes are not only in the realm of medical factors but also in the domain of sociodemographic, environmental and behavioral factors. It is imperative to highlight that in the epidemiology of MCH, there are several independent variables such as heredity, race and ethnicity, income, education, marital status, culture, age groups and area of residence, that are not under the control of the primary role of the MCH/CSHCN programs. Additionally, the contributing factors of the epidemiological model of the MCH are immense. These include medical risk factors, obstetric complications, behavioral risk factors and the quality of prenatal, perinatal, postpartum and pediatric care, among others. The interrelationship of both, the determinant and contributing factors, leads to short term (<1 year), intermediate (1-5 years) and long term (5-10 years) MCH outcomes. The priority needs for PR were drawn from the analysis of this MCH epidemiological model and the government's political priorities.

Figure IV-1 represents the PR Title V Block Grant Performance System. It shows at a glance the relationship of selected priority needs with current available services to address them by levels of the MCH pyramid. The National and State Negotiated Performance Measure are grouped by the level of the pyramid, which includes the programs, services or activities that, if properly implemented, would result in achieving its set goals across the years. The cumulative achievements of the National and State Performance Measures should lead us to reach the ultimate goal of the Title V Program: "Improving the health and well-being of all women in their reproductive age, infants, children, adolescents and their families". The measures that will tell us how effective our efforts have been over the years are the maternal, infant and child death rates shown at the end of the PR Title V Measurement System.

After the earlier general description, we would like to be more specific describing the relationship among the priority needs with the components of PR Title V BG Performance Measurement System. Due to space limitations we will focus on the first five priorities.

1. Improving maternal health. Rate of fetal-neonatal and maternal deaths are indexes that reflect the level of maternal health in Puerto Rico. The five (5) years needs assessment showed that half of all women began pregnancy with either a low BMI or at the obese level. This is a risk factor for pregnancy and perinatal complications affecting the mother as well as a risk factor affecting the unborn baby. Similarly, the WIC program reported that the most common reasons for a pregnant woman to be enrolled in the program were obesity or underweight, inadequate weight gain during pregnancy, or anemia.

Most fetal deaths are related to problems associated with maternal health prior to pregnancy, as well as complications arising during the course of the pregnancy and problems related to the quality of care during pregnancy and delivery (fetal asphyxia).

ESMIPR 2004 found a prevalence of 28.4% of pregnant women requiring one to four hospitalizations during her last pregnancy.

/2008/ ESMIPR 2006 found a prevalence of 24.7% of pregnant women requiring one to four hospitalizations during her last pregnancy. //2008//

***/2010/ ESMIPR 2008 revealed a prevalence of 26.5% of pregnant women who required 1 to 4 hospitalizations during their last pregnancy.//2010//***

The most common reasons for these hospitalizations were premature contractions, vomiting and dehydration, urinary tract infections, placental problems and hemorrhage, blood pressure (eclampsia), diabetes, and others. These data do not include a significant proportion of pregnant women with health conditions such as asthma who are adequately managed as outpatient cases.

To address this priority need it is imperative to assure availability and accessibility to pre-pregnancy services (i.e. family planning), early and regular prenatal care, perinatal care rendered at the most appropriate level of service according to the identified risk, postpartum and inter conceptional care. These services are considered direct services according to the MCH pyramid.

The focal area 16 of HP 2010 provides several measures to help us monitoring this priority. These include: objectives 16-4 aimed at reducing maternal death; 16-6 (PM-18) aimed at increasing the proportion of women who receive adequate prenatal care; 16-9 to reduce cesarean section among low-risk women; and 16-17 to increase abstinence from alcohol, cigarette smoking and illicit drug use among pregnant women.

**Enabling Services:** Among the enabling services are the Home Visiting Program (PR State PM1), the toll-free line, postpartum education provided by perinatal nurses, the WIC program and others.

**Population Based Services:** At the community level a diversity of educational activities are conducted aimed at creating awareness on several health issues and promoting healthy behaviors among women during pregnancy and the inter conceptional period. These educational activities are reinforced with distribution of written education materials. The importance of maintaining an appropriate weight, the need for an annual check up, the importance of early and regular prenatal and its content are emphasized.

**Infrastructure Building Services:** The PR Title V program's staff is actively engaged at this level of the pyramid in activities aimed at promoting a decrease in maternal complications and deaths.

Among these are conducting needs assessments to understand better the prevalence and geographic distribution of health problems. The findings are used to raise awareness among concerned stakeholders; policy development; development and distribution of standard of care for the MCH population groups; quality assurance; implementation of a maternal deaths surveillance system; active participation in coalitions and committees concerned with the promotion of maternal health; professional development, and many other activities.

/2008/ One of the activities performed is the implementation of the Maternal Mortality Surveillance System aimed at gaining a better understanding of the prevalence, causes of death, and geographic distribution of health problems. The findings are used to raise awareness among concerned stakeholders; policy development; development of standards of care for the MCH population groups; quality assurance; active participation in coalitions and committees concerned with the promotion of maternal health; and professional development, among others. //2008//

2. Reduce unintended pregnancies. The HP 2010 agenda (Focus Area 9) has set the target that by 2010, 70% of all pregnancies should be intended. However, in PR there is a wide gap between current proportion of intended pregnancies and the set goal. Findings from the ESMIPR 2004 revealed that almost 7:10 (66.8%) of surveyed recent mothers did not plan their most recent pregnancy. In addition, 12.7% said they did not want their most recent baby. Therefore, it is estimated that over 34,000 babies are born in PR who are not planned. In addition, nearly 6,500 are not wanted by their mother at the time of birth.

/2008/ Findings from the ESMIPR 2006 revealed that almost 6:10 (65.5%) of surveyed recent mothers did not plan their most recent pregnancy. In addition, 6.9% said they did not want their most recent baby. Therefore, it is estimated that over 30,000 babies born in PR are unplanned. In

addition, nearly 6,500 babies are not wanted by their mothers at the time of birth. //2008//

***/2010/ ESMIPR 2008 found that 65.9% of surveyed mothers who had delivered recently had not planned their most recent pregnancy. Besides, 6.7% revealed they did not want to get pregnant ever./2010//***

Unwanted pregnancies are associated with higher rates of abortion on demand, later or no prenatal care, unhealthy behaviors such as smoking, alcohol use, drug abuse and domestic violence. This situation leads to maternal complications and poor birth outcomes, including higher rates of LBW and prematurity, infant mortality, lower rates of breastfeeding and child neglect and abuse, among others.

It is important to mention that there is the knowledge and technology to prevent unwanted pregnancies. However, this requires personal commitment and responsibility at the time of expressing sexuality. On the other hand, comprehensive family planning services must be available and accessible at the community level for those persons who voluntarily want to control the number and spacing of children.

**Direct Services:** In Puerto Rico there are four entities that render family planning services. The Department of Health through the GIP provides male and female sterilizations. Contraceptive methods are complemented by means of Title V funds. Other entities are the Title X (Grantee is the School of Medicine), 19 federally funded 229/330 programs and PROFAMILIA, a non-for profit organization. This entity recently received approval of a Title X Grant.

**Enabling Services:** The toll-free line and the Home Visiting Program, which provides inter conceptional services up to two years after the birth of the baby to all its participants and coordinates needed services at the community level.

**Population Based Services:** Community awareness through small group orientations, dissemination of educational materials. In addition, in collaboration with the Department of Education, the Title V program has implemented a peer group program and curriculum to promote abstinence education throughout the Island.

***/2010/ Federal funds for PRAEP will cease after June 30, 2009./2010//***

**Infrastructure Building Services:** The activities include needs assessment, dissemination of data, professional development and the promotion of public policy.

3. Improve newborn health. Focus Area 16 of HP 2010 establishes several objectives that help us to monitor the health of newborns. Among these are the percentage of LBW and VLBW babies, the perinatal, neonatal, post neonatal and infant mortality rates, etc. The target set for the IMR is no more than 4.5 infant deaths per 1,000 live births for all states, jurisdictions and ethnic groups. In 2003, the IMR in PR was 9.8/1,000 LBs. This rate is 2.1 times higher than the set target and 1.4 times above the U.S. mainland.

//2008/ In 2005, the IMR in PR was 9.3/1,000 LBS. This rate is 1.5 times higher than the set target for PR (6.2/1,000) and 2.1 times above the U.S. mainland. //2008//

The determinant causes for the observed IMR are prematurity and the percentage of LBW/VLBW. Congenital anomalies are the second cause of IM in PR. Among the most frequent congenital anomalies are heart defects and NTDs. It is important to mention that a significant proportion of infants with congenital anomalies survive the neonatal and post neonatal periods to die later at the preschool and school age periods. As a matter of fact, congenital malformations are the third leading cause of death in children between 1-4 years of age in the Island.

LBW and VLBW lead not only to higher IMRs, but also to CSHCN. This group of children require

a large amount of resources, programs and services from different public and private entities to address their complex needs.

**Direct Services:** The GIP provides preventive, primary and some specialized services. The Department of Health complements specialized services with Title V and state funds (Pediatric Centers and the Pediatric Pulmonary Center), the Department of Education and various non-governmental organizations support the needs of this population.

/2009/ PPC ceased operations due to lack of funding.//2009//

**Enabling Services:** Toll-free line, APNI (Asociacion de Padres de Niños con Impedimentos), case management for children 0-3, Home Visiting services, and others.

**Population Based Services:** Among the group of services geared to improving the newborn health are the newborn screening program for congenital hereditary diseases, newborn hearing screening, immunizations, folic acid prevention campaign and Early Intervention Program (Law 51, 1996).

**Infrastructure Building Services:** Needs assessment, Registry of Congenital Anomalies, Autism Surveillance, public policy. Law 51 of 1996 sets forth the development of standards of care, quality assurance, coalitions and committees concerned with the attention of the needs of the population with special health care needs.

/2008/ Another element in the Infrastructure Building Services is the Infant Mortality Surveillance System (SiVEMI, Spanish acronym). This is a continuous surveillance system that monitors infant deaths in PR. The findings are used to raise awareness among concerned stakeholders; policy development; development of standards of care for the MCH population groups; quality assurance; active participation in coalitions and committees concerned with the promotion of infant health; and professional development among others.

Collaborative efforts with the March of Dimes PR Chapter allow us to monitor and disseminate information on two of the contributing factors for infant deaths, prematurity and low birth weight. Recently the MCH program was incorporated on a Steering Committee of Prematurity of the Puerto Rico Chapter of March of Dimes. The main objective of this committee is to analyze all available data concerning premature births to identify the risk factors of prematurity in PR. This analysis will be disseminated to stakeholders and health professionals in a Prematurity Summit scheduled for November 2007. //2008//

4. Reduce adolescent pregnancy. The roots of the problem of adolescent pregnancy are multi factorial and very complex. Therefore, there are no simple strategies to address this public health problem. The need to involve a wide array of stakeholders is crucial in addressing adolescent pregnancy. These include, but are not limited to the family, adolescent themselves, the schools, Department of Health, CBOs, the media, private sector, and non-traditional partners such as the faith community.

Currently, in PR nearly 25 women under 20 years of age become mothers every 24 hours, some as young as 10-14 years of age. Nearly eight out of 10 are unwed and over 90% hold the GIP. Definitely this is a social problem that impacts women in the early reproductive period, their children, families and the society at large.

**Direct Services:** GIP with prenatal and maternity services, newborn and pediatric services, early intervention services, family planning services, among others.

**Enabling Services:** WIC program and Home Visiting services.

Population Based Services: Comprehensive Adolescent Health Services with peer groups, and abstinence education program.

Infrastructure Building Services: Needs assessment, sharing of data, coalitions, public policy, professional development, coordination of services, etc.

5. Reduce behavioral risk factors among pregnant women and adolescents. A significant proportion of pregnant women are engaged in unhealthy behaviors such as smoking, alcohol consumption, illegal drug use and abuse and unprotected sex. These behaviors are contributing factors for the high rates of LBW, premature labor and congenital anomalies which are the determinant factors for our higher rates of IM in the Island. Therefore, we need to address these behaviors in order to improve the maternal and newborn health.

Similarly, our adolescent population involves in behaviors such as smoking, alcohol and illegal drug use and unprotected sexual activity. These behaviors are the root of delinquency, violence (homicides) and motor vehicle crashes with its consequences: deaths and injuries.

/2007/ No changes in PR priority areas are being proposed. //2007//

/2008/ No changes in PR priority areas are being proposed. //2008//

/2009/ The MCH Division has chosen to expand priority 3 to include the entire pediatric population. During the past three years, we have been involved in several investigations to evaluate in a comprehensive way the health and wellbeing of the pediatric population, particularly those in the age ranges of 1-14 years of age. We have discovered that only 55% of our second grade students have a healthy weight. In addition, a study conducted to evaluate the oral health status of third grade students revealed that despite wide dental insurance coverage, services such as dental sealants they are being underutilized and there are disparities in oral health associated with type of school. Only 17% of students evaluated had sealants despite the fact 94% of them had dental insurance. Although deaths related to unintentional injuries are not very numerous, they are unacceptable and must be prevented. PR has the highest asthma prevalence rate in the nation.

To improve child health we are providing the following:

Direct services: Pediatric Centers provide specialized services to CSHCN; the Early Intervention Program provides services to the eligible population 0-3 years old with developmental delays and their families, Medical Home Pilot Project.

Enabling Services: HVP, WIC.

Population Based Services: CHW Program, Immunization, Health Education, Oral Health Program, Metabolic Newborn Screening Program, Universal Newborn Hearing Screening Program.

Infrastructure: HP 2010 Initiative, Safe Kids Coalition, Obesity Prevention Alliance, Public Policy development, Asthma Coalition and State Plan, Law #351 (Birth Defect Surveillance System), SSDI, epidemiological research on public health issues, Needs Assessment for Persons with Autism Spectrum Disorder, Autism public policy, ECCS Project, PR CSHCN survey, CSHCN Section qualitative study to collect data on YSHCN perspectives and needs that will guide the effective implementation of activities in the Transition Action Plan of YSHCN to adult life.//2009//

***An attachment is included in this section.***

## C. National Performance Measures

**Performance Measure 01:** *The percent of screen positive newborns who received timely follow up to definitive diagnosis and clinical management for condition(s) mandated by their State-sponsored newborn screening programs.*

### Tracking Performance Measures

[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

Annual Objective and Performance Data	2004	2005	2006	2007	2008
Annual Performance Objective	96.3	96.5	100	100	100
Annual Indicator	100.0	100.0	100.0	100.0	100.0
Numerator	23	24	17	28	18
Denominator	23	24	17	28	18
Data Source					PR Hereditary Disease and Newborn Screening Prog.
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Provisional	Provisional
	2009	2010	2011	2012	2013
Annual Performance Objective	100	100	100	100	100

#### Notes - 2008

Data for Fiscal Year 2007-2008 provided by the Puerto Rico Hereditary Disease and Newborn Screening Program.

#### Notes - 2007

Updated data for 2007. For source of information refer to 2006 notes.

#### Notes - 2006

Data provided by the Puerto Rico Hereditary Disease and Newborn Screening Program.

#### a. Last Year's Accomplishments

Law No. 84, 1987, mandates universal newborn screening for all live infants born in PR. Currently the Neonatal Screening Program for Hereditary Diseases (NSPHD) screens for PKU, Hypothyroidism, Sickle Cell Anemia, Galactosemia, and Congenital Adrenal Hyperplasia. The NSPHD is a comprehensive program. It performs confirmatory tests in cases with abnormal screening results. In addition, it makes sure parents of children with a confirmed condition receive genetic counseling and their children the specialized medical treatment and nutritional follow up they need.

Form 6 summarizes the newborn screening activity and its results during fiscal year 2007-2008. During this period, the NSPHD program served 45,966 out of the 46,002 registered live births during that time. This figure represents 99.9% of all live births during the reporting year. This increase is the results of having all birthing hospitals agree to send their newborn screen samples to the NSPHD.



During FY 2007-08, a total of 229,817 tests were conducted. Abnormal results were found in 6,940 cases. Eighteen cases (18) cases were diagnosed with a congenital disease. The program identified: PKU-2 cases; hypothyroidism-7 cases; sickle cell anemia-6 cases, two cases of congenital adrenal hyperplasia and one case of galactosemia. All (100%) of them received counseling and follow up treatment. Patients that required, either an evaluation by an endocrinologist, attendance to a metabolic clinic or WIC program services received the appropriate referral. The WIC program provided those under five (5) years of age the specialized formulas their specialist recommended and the Pediatric Centers did the same for those over 5 years of age.

A total of 1,012 newborns with abnormal hemoglobin traits were detected. Among them six had clinically significant hemoglobinopathies. Two of them were diagnosed as having sickle cell anemia. Six hundred and sixty seven family members of the neonates with abnormal traits were evaluated in the clinics. Both the children and their parents were tested to detect abnormal hemoglobins. Those with abnormal results received genetic counseling.

On June 21, 2006 the facilities for the Tandem Mass Spectrophotometer laboratory were formally inaugurated in the Pediatric Hospital. The total investment for this expansion was \$425,000.00. This instrument was installed with the purpose of expanding the number of screenings performed to include conditions such as Carnitine Deficiency, Organic Acid Metabolism Disorder and Fatty Acid Oxidation Metabolism Disorder (MCADD, SCADD, LCADD), Nonketotic Hyperglycemia and some Amino Acid Metabolism Disorders (phenylalanine, methionine, tyrosine, valine). Nevertheless a series of incompatibility issues between the MS/MS components prevented the NSPHD from initiating testing during this reporting year.

Title V funds supports eight perinatal nurses throughout the island that regularly visit birthing hospitals. They provide key follow up activities in those cases where NSPHD is unable to locate the families of infants who screened positive. The MCH staff visit their homes and if necessary summon the help of the Department of the Family or the Police, in an effort to locate them and have them retested.

Perinatal nurses also provide postpartum education, refer potential candidates to primary services and home visiting nurses, disseminate educational materials and collect information. During the reporting period, the perinatal nurses conducted 16,035 individual orientations that benefited 9,408 postpartum women. In addition, they provided 889 group orientations sessions. A total of 6,781 post partum women received specific information regarding neonatal screening.

During CY 2007, the Home Visiting Nurses served 6,390 pregnant women and children under 2 years of age. Orientations regarding the importance of newborn screening for congenital diseases is a topic regularly they include during the interventions with HVP pregnant women. Also the CHW's reached 465 persons at the community level with orientations concerning the importance of newborn screening for hereditary diseases.

**Table 4a, National Performance Measures Summary Sheet**

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Link infants with genetic and metabolic disorders with nutritional and specialized medical care. Refer children with congenital conditions that require nutritional education and management such as PKU and galactosemia to the WIC program.		X		
2. Provide prenatal counseling to all HVP participants regarding the importance of newborn screening.		X		
3. Provide genetic counseling to families of newborns with	X			

genetic or metabolic conditions.				
4. Continue efforts directed at linking newborn screening data files with birth certificates.				X
5. Educate postpartum women on the importance of asking for newborn screening results during the first visit to their pediatrician.		X		
6. Disseminate educational materials regarding the importance of having newborns whose screening is positive receive a confirmatory test and treatment if diagnosis is confirmed.			X	
7. Provide perinatal education to providers and parents regarding the importance of the newborn screens.			X	
8.				
9.				
10.				

#### **b. Current Activities**

The NSPHD continues to work to ensure that all newborns in PR are tested, abnormal tests confirmed and all those with a confirmed condition receive adequate follow up and treatment.

Difficulties with the MS/MS machine have been resolved and the NSPHD began to pilot test the instrument. This testing phase began on March 1, 2009 after the cut off points for each test were determined and the validation phase was concluded. It is currently being used to its full capacity in one third of the samples received by the NSPHD.

A legislative piece is being considered to increase the numbers of tests required. Although this legislation has not been passed there are provisions in Law 84, 1987 that allow a Governor appointed Advisory Committee to increase the number of tests required as part of the universal newborn screening program. So far the Governor has not appointed the Committee members. Once the Committee is formally constituted it will determine which tests will be required for all newborns in PR based on: the latest scientific evidence, test cost effectiveness, local prevalence of the condition and treatment availability.

Efforts to link data from the metabolic screening program and the UNHSP continue. The Birth Defect Registry and the NSPHD have initiated collaborative efforts to share their information. A report of the NSPHD findings starting in 1984 will be included for the first time in the 2008 Birth Defect Annual Report that will be published this summer.

#### **c. Plan for the Coming Year**

The MCH will be submitting to the Secretary of Health and the Governor a list of potential candidates to be considered by Governor for appointments as members of the Advisory Committee. Once officially named members of the Advisory Committee are expected to monitor results from the pilot project. Based on the evaluation of data collected, latest scientific evidence, cost effectiveness of the test and the availability of treatment for the conditions identified by the MS/MS they will provide recommendations on which tests should be included in the universal screening program.

The cost of conducting these additional tests is expected to place an additional financial burden on the NSPHD. They have already identified the need to hire an additional fully certified technician and to purchase an additional MS/MS machine in order to address the increase testing demand and to prevent interruptions in the service due to mechanical malfunctions or the temporary absence of the technician due to vacation or illness. Additional staff will also be required to address all the needs of the patients identified by this new technology.

Efforts will continue to link data of the Universal Newborn Screening Program with data from the Universal Newborn Hearing Screening, Birth Defect Registry and Birth Records. Linking them will be facilitated by the fact that they are all collected around the time of birth and required by law. The UNHSP has already established an electronic system to gather information on all live births in key birthing hospitals. It includes fields where data related to follow up activities and tracking of suspected cases can be entered. This electronic infrastructure can provide an electronic infrastructure on which to build and add additional information that is pertinent to the other programs and registries.

Linking all these data bases and program efforts will help us ensure participants in these programs are not lost to follow up and receive timely confirmatory tests and treatments and will allow us to detect infants who may have received one of the screenings but not the other. In addition, it will reduce data entry time, the need for additional equipment and technical support. It should also help with quality assurance, documentation of appropriate follow up of infants with positive screening tests, and timely treatment of confirmed cases.

**Performance Measure 02:** *The percent of children with special health care needs age 0 to 18 years whose families partner in decision making at all levels and are satisfied with the services they receive. (CSHCN survey)*

#### Tracking Performance Measures

[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

<b>Annual Objective and Performance Data</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
Annual Performance Objective	0	45	49	51	54
Annual Indicator	44.8	44.8	44.8	44.8	44.8
Numerator	162	162	162	162	162
Denominator	362	362	362	362	362
Data Source					2005 Family Survey
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Final	Provisional
	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
Annual Performance Objective	57	57	58	59	59

#### Notes - 2008

For source of information refer to 2006 notes.

#### Notes - 2007

Updated data for 2007. For source of information refer to 2006 notes.

#### Notes - 2006

For this performance measure the data reported in 2006 is pre-populated with data from 2005. This data was obtained from a family survey implemented at the Pediatric Centers in February 2005. This is the first intent made to obtain baseline data for this performance measure. The results are specific for the Pediatric Centers' population and cannot be generalized to the population of CSHCN in Puerto Rico.

#### a. Last Year's Accomplishments

The Committee identified strategies to increase family participation such as linking parent support groups to Title V. A parent support group from the southern region of PR who learned about us through the flyers contacted the CSHCN Section. The CSHCN Section initiated the establishment of links with them by sharing educational materials and information about the Title V Program, the Service Directory and CSHCN special coverage of the GIP. Another parent from the metropolitan area contacted us and took the initiative of gathering a group of parents to be informed about Title V. A meeting was coordinated with this group of eight parents to provide them information about NPMs 2-6.

The Family Voices representative in Puerto Rico revised the Title V Proposal and congratulated the CSHCN Section. She recommended specific mechanisms to increase family participation, such as, creation of a Family Council, design family activities according to identified needs, and establish a family group coalition. The CSHCN Section met with the Family Voices representative and representatives of APNI and parents, to identify strategies to develop a family network. The parents tentatively named this project Puerto Rico Family Net. Strategies to develop a family web page were discussed in these meetings with the Information System Consultant of the CSHCN Section.

The distribution of educational materials for families continued. Fact sheets describing Law 238, 2004 Bill of Rights of Persons with Disabilities were distributed to families with CSHCN that were admitted to the PCs. Materials distributed last year include 1,350 medical home brochures, 3,100 special coverage for CSHN brochures, 1,350 transition to adult life brochures, and 245 Service Directories.

Communications between MCHB, CDC, the PRMCH Division and the PR Immunization Program were held to discuss strategies that would allow the PR CSHCN Program to obtain data for NPMs2-6 by including survey questions as part of the Immunization Survey. Despite the interest of both PR Programs, it was determined that the proposed integration of both surveys was not viable. As a result, the CSHCN Program initiated new strategies to develop and implement the survey. The Program developed and adapted the Spanish SLAITS-CSHCN Survey questionnaire and also developed the study design and methodology. IRB approval was obtained from the UPR-Medical Sciences Campus. The Program received state funds to contract an independent company to perform the survey through telephone interviews with parents of CSHCN. This study will provide valuable and necessary data to determine the CSHCN prevalence, health status, met and unmet needs, collect data for the Title V NPMs 2-6 and provide data for planning purposes.

**Table 4a, National Performance Measures Summary Sheet**

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Identify funds, develop job description and interview candidates for the family representative position.		X		
2. Distribute the brochure about the Title V CSHCN NPMs to families.		X		
3. Establish links with families.		X		
4. Distribute a brochure about the services provided by the CSHCN Program to the families and primary care physicians.		X		
5. Revise and adapt the SLAITS Spanish CSHCN Survey questionnaire and develop study protocol.				X
6.				
7.				
8.				
9.				
10.				

### **b. Current Activities**

The CSHCN Program identified funds for a family representative and a parent with the desirable qualifications was identified. The Program is now in the recruitment process.

The CSHCN Program has developed links with another stakeholder, the Commission of Persons with Disabilities of the PR Society of Lawyers. This Commission requested the CSHCN Program to present information on IDEA Part C (P.L. 108-446) and on complaint procedures to families and lawyers. The Section is collaborating with the Commission by informing families and lawyers about amendments on P.L. 101-336, American with Disabilities Act and other laws regarding people with special health care needs.

An additional brochure containing information for families about the Title V CSHCN performance measures was developed and is being reproduced for its distribution. The other brochures with information to families about medical home, transition to adult life, and CSHCN special coverage in the GIP continue to be distributed to families.

The Program contracted Estudios Técnicos, Inc. to implement the PR Telephone Survey of CSHCN in PR. Ongoing follow up activities are being held with the company to monitor progress on study implementation and to discuss any encountered barrier during the process.

### **c. Plan for the Coming Year**

Activities for the coming year include developing networking links between parents, parent support groups, Title V and other stakeholders. The family representative will be working directly to identify families and family groups throughout the island. Through these linkages, the CSHCN Section will meet parents and families to educate them in the Title V NPMs 2-6, encourage their participation at all levels and facilitate their empowerment. Also the CSHCN Section will collect information about family needs.

The CSHCN Program will receive a descriptive report of the CSHCN Survey results from Estudios Técnicos, Inc. after completion of the data collection phase by June 30, 2009. This report will be revised by the Program and additional analyses will be made to report data for NPMs 2-6 and for planning purposes.

**Performance Measure 03:** *The percent of children with special health care needs age 0 to 18 who receive coordinated, ongoing, comprehensive care within a medical home. (CSHCN Survey)*

#### **Tracking Performance Measures**

[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

<b>Annual Objective and Performance Data</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
Annual Performance Objective	0	41	43	45	46
Annual Indicator	38.7	38.7	38.7	38.7	38.7
Numerator	127	127	127	127	127
Denominator	328	328	328	328	328
Data Source					2005 Family Survey
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-					

year moving average cannot be applied.					
Is the Data Provisional or Final?				Final	Provisional
	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
Annual Performance Objective	48	49	49	49	49

#### **Notes - 2008**

For source of information refer to 2006 notes.

#### **Notes - 2007**

Updated data for 2007. For source of information refer to 2006 notes.

#### **Notes - 2006**

For this performance measure the data reported in 2006 is pre-populated with the data from 2005. This data was obtained from a family survey implemented at the Pediatric Centers in February 2005. This is the first intent made to obtain baseline data for this performance measure. The results are specific for the Pediatric Centers' population and cannot be generalized to the population of CSHCN in Puerto Rico.

#### **a. Last Year's Accomplishments**

The PR MCH Program requested MCHB to offer a TA to revise the EPSDT guidelines. As a result the Guideline for the Pediatric Preventive Services was revised and specific recommendations for the early detection of developmental delays were added. The revised guidelines require the use of the Ages & Stages Questionnaire (ASQ) to screen infants at 9, 18, and 30 months of age, and the use of the M-CHAT to screen for autism at 18 months of age.

Efforts to inform and educate professionals and families about the medical home continued. A total of 1,780 medical home brochures were distributed to families among Pediatric Centers. Also the CSHCN Program provided educational seminars about medical home and transition to adult life of YSHCN to a total of 111 students at the Schools of Medicine of San Juan Bautista and the Caribbean Central University. The Citizens' Affairs Office and MAVI collaborated with these seminars. MAVI is a community-based organization that offers independent life services to people with special needs.

The questionnaire developed by the CSHCN Program to evaluate the medical home components was revised and approved by ASES to collect baseline data at the initial phase of the medical home pilot project. The project faced time frame barriers related to the election year and changes related to negotiations between ASES and the health insurance companies. As a result, Triple C replaced Humana as the health insurance company that provides GIP services in the Bayamón Region. Nevertheless, meetings with ASES have continued and the IPA 318 of Cataño was selected as the medical practice for the implementation of the project. Strategies were discussed with ASES to obtain the IPA providers' commitment with the project.

Communications between MCHB, CDC, the PRMCH Division and the PR Immunization Program were held to discuss strategies that would allow the PR CSHCN Program to obtain data for NPMs 2-6 by including survey questions as part of the Immunization Survey. Despite the interest of both PR Programs, it was determined that the proposed integration of both surveys was not viable. As a result, the CSHCN Program initiated new strategies to develop and implement the survey. The Program developed and adapted the Spanish SLAITS-CSHCN Survey questionnaire and also developed the study design and methodology. IRB approval was obtained from the UPR-Medical Sciences Campus. The Program received state funds to contract an independent company to perform the survey through telephone interviews with parents of CSHCN. This study will provide valuable and necessary data to determine the CSHCN prevalence, health status, met and unmet needs, collect data for the Title V NPMs 2-6 and provide data for planning purposes.

**Table 4a, National Performance Measures Summary Sheet**

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Continue with the implementation of the medical home pilot project.				X
2. Meet with ASES and health insurance companies to identify strategies to promote the medical home implementation.				X
3. Distribute the medical home brochure to CSHCN families.		X		
4. Participate in the SECCS meetings to identify areas of collaboration for the medical home project.				X
5. Revise EPSDT guidelines.				X
6. Coordinate seminars and workshops for medical students about the importance of the medical home for CSHCN and their families.				X
7. Revise and adapt the SLAITS Spanish CSHCN Survey questionnaire and develop study protocol.				X
8.				
9.				
10.				

**b. Current Activities**

The revised Guidelines for Pediatric Preventive Services were approved by the Secretary of Health and are being promoted by the CSHCN Program, ASES, the PR Society of Pediatrics and the AAP Chapter of PR. The Program prepared educational material for pediatricians about the ASQ, benefits of early screening, and a flowchart developed by CDC to implement ASQ in pediatric practices. These materials along with the revised guidelines were distributed to 150 pediatricians during their 2009 annual meeting. Pediatricians also received information from the AAP about CPT codes including screening for developmental delays and autism. Efforts will continue to encourage pediatricians to implement the ASQ in their practices.

The Program continues to meet with ASES for the implementation of the medical home pilot project. The project was recently presented to Triple C to discuss strategies about educating pediatric staff on family and patient centered care, the implementation of the ASQ, and linking the IPA with community based agencies to promote coordinated services. The project was well received by Triple C. The Program and ASES are developing activities to implement the identified strategies.

The Program contracted Estudios Técnicos, Inc. to implement the PR Telephone Survey of CSHCN in PR. Ongoing follow up activities are being held with the company to monitor progress on study implementation and to discuss any encountered barrier during the process.

**c. Plan for the Coming Year**

The CSHCN Program will continue to follow up with ASES for the implementation of the medical home pilot project in the IPA 318 and the coordination of activities in collaboration with ASES and the IPA.

The Program will continue to coordinate seminars and workshops with the Schools of Medicine to educate students about the medical home. The medical home brochure will continue to be distributed to families served by the Pediatric Centers and at the community level. The CSHCN Program will continue to participate in SECCS meetings which will allow us to strengthen collaborative efforts for the medical home project for children in PR.

The CSHCN Program will receive a descriptive report of the CSHCN Survey results from

Estudios Técnicos, Inc. after completion of the data collection phase by June 30, 2009. This report will be revised by the Program and additional analyses will be made to report data for NPMs 2-6 and for planning purposes.

**Performance Measure 04:** *The percent of children with special health care needs age 0 to 18 whose families have adequate private and/or public insurance to pay for the services they need. (CSHCN Survey)*

#### Tracking Performance Measures

[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

<b>Annual Objective and Performance Data</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
Annual Performance Objective	0	18	19	20	21
Annual Indicator	17.0	17.0	17.0	17.0	17.0
Numerator	53	53	53	53	53
Denominator	311	311	311	311	311
Data Source					2005 Family Survey
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Final	Provisional
	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
Annual Performance Objective	22	23	23	23	23

#### Notes - 2008

For source of information refer to 2006 notes.

#### Notes - 2007

Updated data for 2007. For source of information refer to 2006 notes.

#### Notes - 2006

For this performance measure the data reported in 2006 is pre-populated with the data from 2005. This data was obtained from a family survey implemented at the Pediatric Centers in February 2005. This is the first intent made to obtain baseline data for this performance measure. The results are specific for the Pediatric Centers' population and cannot be generalized to the population of CSHCN in Puerto Rico.

#### a. Last Year's Accomplishments

A brochure with information for families about the special coverage to CSHCN in GIP's continued to be distributed. A total of 2,300 brochures were distributed to families at the regional Medicaid offices. Families come to these offices for annual eligibility evaluation for the GIP. The purpose of the brochure is to empower families with knowledge about the special coverage benefits, and to know where and how to make complaints. Along with this brochure, another one was distributed to inform families about the Pediatric Centers' services, eligibility criteria, costs and medical referral requirements for Title V services.

The CSHCN Program continued its efforts to get health insurances to be involved with Title V in the implementation of medical homes. The program has faced barriers with health insurance companies due to their reluctance about the medical home concept, reimbursement of specific CPT codes, and incentives for pediatricians that implement medical homes. In meetings with



ASES, new strategies were discussed to encourage the participation of health insurance companies under GIP.

The CSHCN Program provided information to ASES regarding the definition of CSHCN and the services offered by the Early Intervention and Title V Programs at the Pediatric Centers to be distributed among physicians that provide services to children with the GIP.

Communications between MCHB, CDC, the PRMCH Division and the PR Immunization Program were held to discuss strategies that would allow the PR CSHCN Program to obtain data for NPMs 2-6 by including survey questions as part of the Immunization Survey. Despite the interest of both PR Programs, it was determined that the proposed integration of both surveys was not viable. As a result, the CSHCN Program initiated new strategies to develop and implement the survey. The program developed and adapted the Spanish SLAITS-CSHCN Survey questionnaire and also developed the study design and methodology. IRB approval was obtained from the UPR-Medical Sciences Campus. The program received state funds to contract an independent company to perform the survey through telephone interviews with parents of CSHCN. This study will provide valuable and necessary data to determine the CSHCN prevalence, health status, met and unmet needs, collect data for the Title V NPMs 2-6 and provide data for planning purposes.

**Table 4a, National Performance Measures Summary Sheet**

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Distribute the GIP special coverage brochure to CSHCN families.		X		
2. Continue to meet with ASES and health insurance companies in order to identify strategies and potential collaborative efforts to address families' needs and complaints.				X
3. Give ASES information about the services provided by Pediatric Centers to be distributed to GIP providers.		X		
4. Revise and adapt the SLAITS Spanish CSHCN Survey questionnaire and develop study protocol.				X
5.				
6.				
7.				
8.				
9.				
10.				

#### **b. Current Activities**

The brochures with information about the special coverage, complaint processes and information about the CSHCN's services continue to be distributed among families at Medicaid offices and PC's.

The CSHCN Program met with the Office of Patient's Ombudsman (OPO) to discuss CSHCN families' issues, especially difficulties to obtain referrals to specialists. The need to standardize the complaint process was also discussed. The program requested data from OPO about families' complaints to identify priorities and develop strategies to address some of these issues.

The program continues with the implementation of the medical home pilot project in the Bayamón Region. The project's benefits for families and providers were presented to Triple C, the health insurance company that provides GIP services in the region.

The CSHCN Program updated a list of CSHCN diagnoses requested by ASES. The list is

intended to serve as a general guide to medical providers and does not exclude any unlisted condition. ASES has standardized the eligibility process for the special coverage for CSHCN by the four health insurance companies under GIP's, and has requested a maximum of three days for these companies to respond to the special coverage requests.

The program contracted Estudios Técnicos, Inc. to implement the PR Telephone Survey of CSHCN in PR. Ongoing follow up activities are being held with the company to monitor progress on study implementation and to discuss barriers during the process.

### c. Plan for the Coming Year

The CSHCN Program will coordinate meetings with ASES, OPO and health insurance companies to assess the current process to access the specialty services for CSHCN under GIP. Based on the assessment, the program will develop and submit recommendations for the adequate and timely care for CSHCN.

Meetings with OPO will continue for the identification of families' needs and the development of strategies to address them. The data that OPO will provide about the complaints of CSHCN families related to the benefit package will be analyzed to identify needs. This data will be shared with the health insurance companies. It is expected that this information will assist the insurance companies to identify strategies to improve access to services for this population.

The program will continue the implementation of the medical home pilot project in collaboration with ASES. The CSHCN Program will share information about the families' needs with the project's staff.

The brochure about the special coverage will continue to be distributed among families.

The CSHCN Program will receive a descriptive report of the CSHCN Survey results from Estudios Técnicos, Inc. after completion of the data collection phase by June 30, 2009. This report will be revised by the Program and additional analyses will be made to report data for NPMs 2-6 and for planning purposes.

**Performance Measure 05:** *Percent of children with special health care needs age 0 to 18 whose families report the community-based service systems are organized so they can use them easily. (CSHCN Survey)*

#### Tracking Performance Measures

[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

<b>Annual Objective and Performance Data</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
Annual Performance Objective	0	70	71	73	75
Annual Indicator	68.0	68.0	68.0	68.0	68.0
Numerator	246	246	246	246	246
Denominator	362	362	362	362	362
Data Source					2005 Family Survey
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					

Is the Data Provisional or Final?				Final	Provisional
	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
Annual Performance Objective	76	77	77	77	77

#### Notes - 2008

For source information refer to 2006 notes.

#### Notes - 2007

Updated data for 2007. For source of information refer to 2006 notes.

#### Notes - 2006

For this performance measure the data reported in 2006 is pre-populated with the data from 2005. This data was obtained from a family survey implemented at the Pediatric Centers in February 2005. This is the first intent made to obtain baseline data for this performance measure. The results are specific for the Pediatric Centers' population and cannot be generalized to the population of CSHCN in Puerto Rico.

#### a. Last Year's Accomplishments

The service directory was developed by the CSHCN Program to provide information about CBO's, public and private agencies, and other organizations that offer services to CSHCN and their families throughout the island. The directory was revised, updated and expanded to include additional agencies and was reproduced for its distribution. The directory was also updated in the Department of Health web page. A total of 245 service directories were distributed to families and coordinators at the Pediatric Centers during the last year.

The CSHCN Program included the importance of an integrated, comprehensive and community-based health service system for CSHCN as a topic in its educational seminars. The purpose is to provide detailed information of the components that describe a system of service for CSHCN and their families to current and future health care professionals.

Communications between MCHB, CDC, the PRMCH Division and the PR Immunization Program were held to discuss strategies that would allow the PR CSHCN Program to obtain data for NPMs 2-6 by including survey questions as part of the Immunization Survey. Despite the interest of both PR Programs, it was determined that the proposed integration of both surveys was not viable. As a result, the CSHCN Program initiated new strategies to develop and implement the survey. The Program developed and adapted the Spanish SLAITS-CSHCN Survey questionnaire and also developed the study design and methodology. IRB approval was obtained from the UPR-Medical Sciences Campus. The Program received state funds to contract an independent company to perform the survey through telephone interviews with parents of CSHCN. This study will provide valuable and necessary data to determine the CSHCN prevalence, health status, met and unmet needs, collect data for the Title V NPMs 2-6 and provide data for planning purposes.

**Table 4a, National Performance Measures Summary Sheet**

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Distribute the Directory of Services to Pediatric Centers, agencies and organizations.		X		
2. Promote the inclusion of the Directory of Services in the web pages of other organizations.				X
3. Coordinate seminars and workshops about the importance of a comprehensive system of services for CSHCN and their families.		X		
4. Revise and adapt the SLAITS Spanish CSHCN Survey				X

questionnaire and develop study protocol.				
5.				
6.				
7.				
8.				
9.				
10.				

#### **b. Current Activities**

The CSHCN Program is working at a new initiative to develop additional collaborations between stakeholders. Communications are on the way to create web linkages for the Service Directory and the Department of Health web page with APNI, the AAP and the Puerto Rican Society of Pediatrics. According to a survey from Estudios Técnicos, Inc. approximately 38% of persons 12 years of age and older (1.2 millions) use internet in PR.

The CSHCN continues the distribution of the service directory. During the reporting year a total of 250 service directories have been distributed among families and professionals. The importance of a health service system that works together as a net working system continues to be promoted at stakeholders' meetings and other activities.

The Program contracted Estudios Técnicos, Inc. to implement the PR Telephone Survey of CSHCN in PR. Ongoing follow up activities are being held with the company to monitor progress on study implementation and to discuss any encountered barrier during the process. This survey will provide information on services that families need and are not accessible and reasons given by families for not obtaining services.

#### **c. Plan for the Coming Year**

One of the strategies for the successful implementation of the medical homes is the linking of the medical home with community based organizations in the region. To achieve this, the PR CSHCN Program is planning, with the collaboration of ASES, the coordination of workshops offered by community based organizations to the IPA staff participating in the pilot project. These organizations will be identified through the service directory and the CSHCN Committee. This activity is expected to expand the interagency service coordination and the advance on the development of a comprehensive system of service.

The service directory will be distributed to the medical home pilot project staff and to CSHCN families that receive services in the participant IPA. The directory will continue to be distributed to families.

The CSHCN Program will receive a descriptive report of the CSHCN Survey results from Estudios Técnicos, Inc. after completion of the data collection phase by June 30, 2009. This report will be revised by the Program and additional analyses will be made to report data for NPMs 2-6 and for planning purposes.

**Performance Measure 06:** *The percentage of youth with special health care needs who received the services necessary to make transitions to all aspects of adult life, including adult health care, work, and independence.*

#### **Tracking Performance Measures**

[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

<b>Annual Objective and Performance Data</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
Annual Performance Objective	0	10	12	14	16

Annual Indicator	9.1	9.1	9.1	9.1	9.1
Numerator	9	9	9	9	9
Denominator	99	99	99	99	99
Data Source					2005 Family Survey
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Final	Provisional
	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
Annual Performance Objective	18	20	20	20	20

#### **Notes - 2008**

For source of information refer to 2006 notes.

#### **Notes - 2007**

Updated data for 2007. For source of information refer to 2006 notes.

#### **Notes - 2006**

For this performance measure the data reported in 2006 is pre-populated with the data from 2005. This data was obtained from a family survey implemented at the Pediatric Centers in February 2005. This is the first intent made to obtain baseline data for this performance measure. The results are specific for the Pediatric Centers' population and cannot be generalized to the population of CSHCN in Puerto Rico.

#### **a. Last Year's Accomplishments**

The CSHCN Program designed a qualitative study to collect data about youth with special health care needs' (YSHCN) perspectives on barriers and positive experiences that facilitate their transition from pediatric care to an adult medical provider. The study consists of in-depth interviews to YSHCN that have completed their transition to adult life. The questions for the interviews cover four areas: concept of health and adult life, experiences during the transition process, personal opinions, and recommendations to health care providers and other YSHCN. Questions were designed with the collaboration of the MCH anthropologist. The study protocol was submitted to the UPR-Medical Sciences Campus IRB for approval. The information from the qualitative study will guide the development of additional studies and the effective implementation of the activities in the Transition Action Plan.

A brochure for pediatricians and family physicians about YSHCN transition to adult life was developed by the CSHCN Program. The brochure describes the services provided by the six Centers for Independent Living throughout the island and their contact information. These brochures were distributed to approximately 150 pediatricians during the 2009 Annual Convention of the Puerto Rican Society of Pediatricians. Most of them were unaware of the existence of these centers.

Efforts to inform and educate families about the process of transition to adult life continued. A total of 1,940 brochures about transition to adult life were distributed to families among PCs. Also the CSHCN Program provided educational seminars about medical home and transition to adult life of YSHCN to a total of 45 students at the School of Medicine of Caribbean Central University. The Citizens' Affairs Office and MAVI collaborated with these seminars. MAVI is a community-based organization that offers independent living services to people with special needs.

Communications between MCHB, CDC, the PR MCH Division and the PR Immunization Program were held to discuss strategies that would allow the PR CSHCN Program to obtain data for NPMs 2-6 by including survey questions as part of the Immunization Survey. Despite the interest of both PR Programs, it was determined that the proposed integration of both surveys was not viable. As a result, the CSHCN Program initiated new strategies to develop and implement the survey. The Program developed and adapted the Spanish SLAITS-CSHCN Survey questionnaire and also developed the study design and methodology. IRB approval was obtained from the UPR-Medical Sciences Campus. The Program received state funds to contract an independent company to perform the survey through telephone interviews with parents of CSHCN. This study will provide valuable and necessary data to determine the CSHCN prevalence, health status, met and unmet needs, collect data for the Title V NPMs 2-6 and provide data for planning purposes.

**Table 4a, National Performance Measures Summary Sheet**

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Distribute the brochure about transition of YSHCN to adult life to families in the PCs.		X		
2. Design the qualitative study protocol to gather information of YSHCN perspectives on health care transition after IRB approval.				X
3. Coordinate seminars about transition to adult life offered to medical students.				X
4. Distribute the brochure about transition of YSHCN to adult life to pediatricians.				X
5. Revise and adapt the SLAITS Spanish CSHCN Survey questionnaire and develop study protocol.				X
6.				
7.				
8.				
9.				
10.				

#### **b. Current Activities**

The qualitative study "Transition to Adult Life at the Health Level: Experiences and Perceptions of YSHCN" is pending IRB approval for its implementation.

Educational brochures about transition to adult life are being distributed to families and physicians in the PC's.

The CSHCN Program provided educational seminars about medical home and transition to adult life of YSHCN to a total of 66 students at the Schools of Medicine of San Juan Bautista and the Caribbean Central University (CCU). The CCU has expressed their interest to the CSHCH Program to offer the seminar on a yearly basis. The plan is to present these seminars at other medical schools and eventually to pediatricians and other primary physicians in PR.

The Program contracted Estudios Técnicos, Inc. to implement the PR Telephone Survey of CSHCN in PR. Ongoing follow up activities are being held with the company to monitor progress on study implementation and to discuss any encountered barrier during the process.

#### **c. Plan for the Coming Year**

The CSHCN plan is to implement the qualitative study after the IRB approval. The collected data will be recorded, transcribed and analyzed. Results will be discussed with the CSHCN Committee for decision making, identification of new strategies, and modification of the Action Plan, if appropriate. The information gathered will complement the PR Survey of Children with Special Care Needs.

Educational brochures will continue to be distributed among families and health care providers.

The CSHCN Program will receive a descriptive report of the CSHCN Survey results from Estudios Técnicos, Inc. after completion of the data collection phase by June 30, 2009. This report will be revised by the Program and additional analyses will be made to report data for NPMs 2-6 and for planning purposes.

**Performance Measure 07:** *Percent of 19 to 35 month olds who have received full schedule of age appropriate immunizations against Measles, Mumps, Rubella, Polio, Diphtheria, Tetanus, Pertussis, Haemophilus Influenza, and Hepatitis B.*

#### Tracking Performance Measures

[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

<b>Annual Objective and Performance Data</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
Annual Performance Objective	92	93	94.5	95	95.5
Annual Indicator	92.7	94.5	94.5	91.2	91.2
Numerator	921	926	926	903	903
Denominator	994	980	980	990	990
Data Source					PR Immunization Program
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Final	Provisional
	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
Annual Performance Objective	96	96.5	96.5	96.5	96.5

#### Notes - 2008

Data from the Immunization Coverage Study provided by the PR Immunization Program of the Department of Health corresponding to the year 2007. This study surveyed children 35 months of age.

#### Notes - 2007

Data from the Immunization Coverage Study provided by the PR Immunization Program of the Department of Health corresponding to the year 2007. This study surveyed children 35 months of age.

#### Notes - 2006

Data from the Immunization Coverage Study provided by the PR Immunization Program of the Department of Health, corresponding to year 2005.

#### a. Last Year's Accomplishments

Law 25 of 1983 mandates children living in PR must be immunized according to the latest immunization schedule approved by the Secretary of Health. The Immunization Program (IP) of

the PRDoH has been conducting periodic immunization coverage studies to monitor compliance with established national and local guidelines. For the purpose of the study a full immunization schedule for children 35 months of age consists of 4 DTaP, 3 IPV, 3 HiB, 1 MMR and 3 Hepatitis B vaccines.

In 2006, CDC determined all Island territories would determine immunization coverage by administering standardized CDC questionnaire to a sample of the population selected using cluster sample methodology. The UPR School of Public Health was awarded a contract to select the sample and conduct house to house surveys in order to gather the data required to determine immunization coverage. Their staff was able to complete house to house surveys during the summer of 2006. This data has been entered using the software provided by CDC. Information gathered during the study has presented challenges that have prevented us from obtaining the final report from CDC.

In view of this delay, the PR Immunization Program repeated the same vaccination coverage study in May 2007 following the methodology they had traditionally used. It revealed 91.2% of 35 month olds had received a full schedule of age appropriate immunizations against Measles, Mumps, Rubella, Polio, Diphtheria, Tetanus, Pertussis, Haemophilus Influenza and Hepatitis B. Coverage for single antigens was even higher. Nearly all (93%) had 4 DTaP, 98% had 3 doses of the Polio and 97% of children had 1 MMR dose. A complete series of Hepatitis B vaccines was documented at 98% and at 95% for HIB among children included in the study. In addition, 93% had at least one Varicella vaccine.

The immunization schedule was reviewed on January 2008 in order to comply with current CDC, ACIP and AAP Guidelines. This schedule established 11 year olds should receive Tdap boosters as well as the MCV and HPV vaccines. This age group was selected for logistical purposes. Selecting this specific age group will allow the IP and schools to monitor compliance with current recommendations with greater ease. The revised schedule maintains the recommendations for Influenza, Hepatitis A, Rotavirus, Pneumococcal and Varicella Booster Vaccines. This new schedule was rolled out to the press during the 2008 Childhood Vaccination Week. As part of the celebration 60 special immunization clinics were held; 2,089 children under the age of 18 were vaccinated. In addition, during the Back to School Campaign 63 special clinics were held reaching a total of 3,120 students. During the annual 2007-2008 Influenza Vaccine Campaign 1,528 persons between the ages of 1-24 received at least one dose of Influenza Vaccine.

This level of coverage is a reflection of the multiple collaborative efforts the PRDoH has been able to establish with public and private entities such as WIC, Private Insurance Companies, providers, schools, pharmacies, grocery stores, and pharmaceutical companies, among others. A key collaborator has been the Maternal and Child Health Division. Our Home Visiting Nurses and Community Health Workers are constantly reminding participants and the community at large of the importance of adequately immunizing their children during home visits, school activities and health fairs.

During CY 2007-2008, children from the 6,390 families in the HVP were evaluated for the adequacy of their immunization status, counseled and referred for vaccination, if needed. The MCH Division reports that 97% of Home Visiting Program participants had an up to date immunization record at the time they were discharged from the program. In addition, 6,194 individuals participated in 581 group meetings where they received information on the importance of children's immunizations.

**Table 4a, National Performance Measures Summary Sheet**

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Assess and promote adequate immunization for children		X		



participating in the Home Visiting Program.				
2. Collaborate with the Immunization Program initiatives to promote disease prevention.			X	
3. Identify and address system barriers which affect access to immunizations.				X
4. Use diverse community level interventions to disseminate the current immunization schedule.			X	
5.				
6.				
7.				
8.				
9.				
10.				

#### **b. Current Activities**

The 2009 revised immunization schedule recommends catch up efforts conducted to insure 11-13 year olds receive a second Varicella dose and also expands the age range for MCV administration to include those between 11-18 years of age. It also includes HPV administration for females between the ages of 11-18.

In order to address the challenges parents of pediatric patients were facing when trying to vaccinate them with the required vaccines several workgroups were convened to analyze the problem and prepare a long term plan that would facilitate and promote immunization within the context of a pediatric preventive office visit. Some of the access barriers they identified were: reductions in the number of special clinics and increased accountability measures put in place to insure compliance with federal funding requirements and the reduction in the number of pediatricians offering immunization services to privately insured children in PR. In order to provide a short term solution to this situation the Governor assigned \$750,000 dollars to the DoH in order for it to establish 5 Regional Immunization Clinics. These funds allowed these centers to purchase and administer vaccine to the privately insured pediatric population. Once administered the clinics would bill the private insurance companies and the monies obtained used to purchase additional vaccines. Several private hospitals also followed this lead and opened their own special vaccine clinics within their facilities.

#### **c. Plan for the Coming Year**

We expect to receive the results of the 2006 CDC immunization coverage study soon and to be able to compare its findings with the local IP study. A new CDC study following the same cluster methodology will be conducted in 2009. This time the survey will be modified to include questions that will allow us to determine if a telephone survey will provide the same information as the house to house study. If this proves to be true PR will be considered for participation in the National Immunization Survey. In case there is a delay in the CDC sponsored study the Puerto Rico Department of Health Immunization Program will repeat its own local immunization coverage study in order to monitor progress regarding this indicator.

The IP will continue to supply VFC providers with the vaccines included in the immunization schedule. Vaccines will be distributed directly to their offices. Once there, providers will be responsible for administering them exclusively to those that qualify (Medicaid eligible, uninsured and underinsured) and for storing them adequately.

The changes in the immunization requirements and the locations where they will be available will require that MCH staff and pediatricians are kept abreast of the changes so they can assist parents in locating and receiving these services. The IP staff and its infectious disease consultant will recommend adjustments to the current vaccine schedule in order to address any vaccine

shortages.

Every April, Child Immunization Week celebration takes place. During this time IP staff conducts a media tour to explain changes in immunization schedule, requirements, location and insurance coverage. This information is also provided during health fairs, school and child care activities, CME activities and by distributing flyers in community based activities.

HVNs and CHWs will continue to educate and promote compliance with the vaccine schedule during home visits, school activities and health fairs. HVNs will evaluate the immunization status of the HVP participants and determine compliance with the immunization schedule. If HVP children are not complying with the current schedule, they will be referred to a provider for immunization.

The information gathered during the home visits, outreach activities and during activities conducted by the regional IP will help us monitor immunization rates at the municipal and regional level. Those barriers and emerging difficulties as well as the impact the Regional Immunization Centers have had in resolving the access barrier for the privately insured identified with our staff will be shared with the IP. To will continue to work to insure the pediatric population has access to vaccines within the medical home setting.

A special effort is being conducted to increase the number of pediatricians in private practice that enter vaccination data directly into the Immunization Registry Web Site.

**Performance Measure 08:** *The rate of birth (per 1,000) for teenagers aged 15 through 17 years.*

Tracking Performance Measures

[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

<b>Annual Objective and Performance Data</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
Annual Performance Objective	39.2	37.7	36.2	34.7	33.2
Annual Indicator	41.1	40.5	39.1	36.4	33.8
Numerator	3656	3561	3433	3223	2995
Denominator	89014	88032	87842	88494	88668
Data Source					Birth Certificate OITA
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Final	Provisional
	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
Annual Performance Objective	31.7	30.2	30.2	30.2	30.2

**Notes - 2008**

Updated data for 2006 and 2007.

2008 Numerator: Data provided by the Office of Informatics and Technology Advances (OITA) of the Department of Health.

2008 Denominator: Population estimates of the US Census.

**Notes - 2007**

Updated data for 2007. For source of information refer to 2006 notes.

**Notes - 2006**

Numerator: Preliminary data obtain from the Office of Informatics and Technology Advances (OITA) of the Department of Health. Denominator: Population estimates of the US Census.

**a. Last Year's Accomplishments**

It is encouraging that during the past 10 years there has been a constant and statistically significant decrease of 39.2% in the birth rate of the age group 15-17, from 59.9 per 1,000 in 1997 to 36.4 in 2007. The MCH Division continued using the Positive Youth Development (PYD) model as its main strategy to promote youth health and prevent high risk behaviors such as premature and unprotected sex which can lead to teen pregnancy. The final versions of the six modules of the culturally appropriate PYD Action Guide for Puerto Rico were finished.

The MCH Division's Adolescent Health Program (SISA) continued the Juvenile Health Promoters' Project (JHPP) in 36 public middle schools in Puerto Rico. A total of 600 JHPs between the ages 12-15 organized and held 164 activities attended by 6,607 fellow students, parents and the general public during the school year. Activities focused on health promotion and dissemination of high risk behaviors' prevention messages including avoidance of early, unprotected sexual relationships that may lead to teen pregnancies and other consequences. The JHPP Demonstration Project continued in two (2) Juvenile Detention Centers. Seventeen (17) males and 17 females participated as Juvenile Health Promoters in the project's workshops and activities that included healthy self esteem, positive personal relationships, sexuality education and future goals setting.

The SISA Regional Coordinators conducted 438 educational activities about adolescence health promotion and risk prevention to 9,526 participants island-wide. In addition, the MCH personnel offered 3,613 interventions on teen pregnancy prevention, sexuality education, self esteem, sexual development and other related themes to 65,977 students and adults. Also, of a total of 286 pregnant females attending sixteen (16) "Comenzando Bien" workshops, approximately 48% were pregnant teens.

The Secretary of Health issued March: Teen Pregnancy Prevention Month in Puerto Rico. During March 2008, the JHPs and MCH personnel held 98 additional teen pregnancy prevention activities reaching 3,450 students and adults. A total of 883 teens in the eight (8) PR's DOH regions participated in forty-six (46) open forum discussions ("Conversatorios") about dating ("noviazgo") and teen pregnancy guided by SISA Coordinators. This strategy promotes healthy communication between teens and adults and helps adults understand adolescents' views about teen pregnancy. The information gathered was forwarded to the MCH anthropologist for analysis in order to identify new strategies and initiatives. The first Teen Summit Encounter "Creando Lazos de Unión" of JHPP delegates, school facilitators, SISA Coordinators and other DoH personnel was held in May 2008. Thirty-two (32) youth delegates from 19 schools participated in workshops and activities to gather their input about the project's future activities and youth participation.

"Plain Talk/Hablando Claro" Demonstration Project reached its third year as a collaborative effort of Annie Casey Foundation, Naranjito Teen Program (NTP) and PR's MCH Division. The site was able to reach the goal of 50% saturation level in the community. With a population of 300 residents they were able to meet this goal by completing 22 sets or 44 individual sessions of "Vecino a Vecino" (V-V) educational meetings and 105 Community Forums. Over the three year period, 210 (duplicated) residents (97 unduplicated participants) participated in the V-V meetings and 1,387 individuals including residents, policymakers, educators, healthcare providers and other partners participated in the many forums where the Plain Talk messages were shared.

The Puerto Rico Abstinence Education Program (PRAEP) sponsored 631 activities reaching 37,788 participants. PRAEP provided WAIT Training and Game Plan curriculums and PYD strategies to 183 teachers of public and private schools and mentors. Interactive workshops for parents and teens reached 420 persons. A mass media campaign "LOCS" (The Other Face of Sex) was launched and its website was visited by 74,489 persons. An educational activity closed LOCS media campaign with 1,457 participants. PRAEP "Leaders for Wise Decisions" held 4 summits and follow up workshops to 67 students and 22 community leaders. The strategies included developing teen's self esteem, decision making, leadership and character formation in underserved communities in collaboration with agencies and other projects.

**Table 4a, National Performance Measures Summary Sheet**

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Disseminate Positive Youth Development (PYD) Model in PR using the Action Guide and Train the Trainer developed by "Reto y Esperanza" Project.			X	
2. Support the PYD community pilot program in Naranjito to promote positive and healthy development of teens and prevent risk behaviors.		X		
3. Coordinate educational activities in schools and communities to promote healthy behaviors and prevent teen pregnancies.			X	
4. Continue the SISA's Juvenile Health Promoters Project (JHPP) in public middle schools and SISA's JHPP Pilot Project in 2 Juvenile Justice schools.			X	
5. Facilitate the development of culturally appropriate educational materials and PYD activities by teens to promote healthy behaviors and prevent teen pregnancies.			X	
6. Increase awareness on issues related to teen pregnancies among health professionals and the general public including parents and communities.			X	
7. Support Plain Talk/Hablando Claro Project aimed at enhancing parent-child and adult-youth effective communication about sexuality to prevent teen pregnancies in communities.			X	
8. Provide the WAIT Training and Game Plan curriculum and activities by the Abstinence Education Program (PRAEP) to middle and high schools, in collaboration with the Department of Education.			X	
9. Develop peer group meetings promoting sexual abstinence (AMORES), continue to implement innovative strategies including fine arts and homemade video production and establish community abstinence coalitions.				X
10. Increase parental awareness on how they can approach their children regarding sexual abstinence education to prevent teen pregnancies through a mass media campaign.			X	

#### **b. Current Activities**

The implementation of PYD model as a teen pregnancy prevention strategy continues. Naranjito's Initiative is spreading PYD in its communities. PYD Action Guide modules are being revised as a result of pilot test evaluation done with 12 adults.

JHPP continues with 594 youths in 37 public middle schools. A meeting with the DoE Health Education Director was held to address challenges of the JHPP implementation in public schools. As a result, an endorsement letter was signed by the new Secretary of Education to assure the

continuation of the project. The JHPP in Juvenile Justice continues with 10 youths in the girl's facility. Island wide activities were held in March: Teen Pregnancy Prevention Month.

The MCH anthropologist analyzed last year's "Conversatorios" to identify new strategies and initiatives. MCH is carrying out the research study: "Pregnancy and Motherhood: Cultural Perspectives of High School Teen Mothers and Pregnant Teens in the Bayamón Health Region" It aims at exploring the cultural views of female adolescents on teen pregnancy and motherhood through qualitative interviews. Plain Talk/"Hablando Claro" Project reached its final phase conducting the 2nd Community Mapping Survey.

PRAEP offered educational activities to train teachers and community members in the project's strategies. A new mass media campaign targeting parents started and interactive workshops for parents and teens were held. Coalition development and community outreach efforts continued.

### **c. Plan for the Coming Year**

The MCH staff, including SISA, will continue to address the issue of pregnancies among adolescents stressing the use of PYD strategies. Revised PYD Action Guide modules will be pilot tested with SISA's Adolescent Regional Coordinators which in turn will become trainers of the intervention as PYD Promoters. They are expected to disseminate PYD in their region's MCH personnel, government and community entities. The PYD Action Guide and training will also be made accessible to other interested adults and youths to become PYD Promoters.

SISA Program's Juvenile Health Promoters Project will continue and expand in public schools with the support of Department of Education endorsement letter. The evaluation of the three year cycle JHPP 2006-2009 will be started. The curriculum guide "Jóvenes Saludables en Acción" and the Implementation Guide will be revised after the evaluation. The Health Promotion Schools Initiative will be considered as a collaborative effort of DOH and DOE in participating JHPP Schools. The JHPP demonstration project in juvenile justice institutions will continue. SISA Collaboration with programs that provide services and support for pregnant and parenting teens will continue. MCH visiting nurses will continue offering interconceptional services to adolescent participants to promote they space their future pregnancies.

The report of "Hablando Claro" Project 2005-2008 made by the Annie E. Casey Foundation will be shared with the Naranjito's La Sabana community residents, to stakeholders and professionals that contributed to the initiative. Project's next steps will be considered.

The report of the study "Pregnancy and Motherhood: Cultural Perspectives of High School Teen Mothers and Pregnant Teens in the Bayamón Health Region" will be completed and distributed among interested health, educational and human service professionals. The results of the study will be used also to develop culturally appropriate strategies for teen pregnancy prevention and health promotion among Puerto Rican youth, and specifically in the Bayamón health region.

The MCH Division will continue gathering information from Vital Statistics to analyze trends in teen birth rates by age groups to update data for each municipality. This information will be used by SISA in educational presentations and collaborative efforts with different government agencies and in each DOH region to address teen pregnancy prevention's specific initiatives. Meetings will be convened in each health region's selected municipalities to work out strategic collaborative plans between government agencies, NGO's and youths to develop specific plans, implementation and evaluation using the PYD model. SISA will educate parents and adults on the importance of establishing connections and communicate with teens in order to protect them from engaging in high risk behaviors.

PRAEP as other abstinence projects will not receive continuation funds for the years to come.

**Performance Measure 09:** *Percent of third grade children who have received protective sealants on at least one permanent molar tooth.*

Tracking Performance Measures

[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

<b>Annual Objective and Performance Data</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
Annual Performance Objective	20	10	6	6.5	7
Annual Indicator	5.9	4.7	3.7	5.1	7.6
Numerator	7067	5599	4283	5805	8486
Denominator	119976	118237	117161	114666	111098
Data Source					Health Insurance Commissioner and US Census
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Final	Provisional
	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
Annual Performance Objective	7.5	8	8.5	9	9.5

**Notes - 2008**

For source of information refer to 2006 notes.

**Notes - 2007**

Updated data for 2007. For source of information refer to 2006 notes.

**Notes - 2006**

Data regarding the grade in which the children are enrolled is not available in the billing forms. The reported number is an estimation based on the information provided by the Health Insurance Commissioner and the Administration of the GIP that reflects the number of 8 to 9 year old children who received protective sealants on at least one permanent molar tooth during the last year (2006).

Data on the denominator is the estimated population of children of 8 and 9 years old in PR according to the US Census.

We recommend that this performance measure be revised to include age instead of grade in school.

**a. Last Year's Accomplishments**

As a result of the implementation of the Health Care Reform in Puerto Rico, all individuals under 200% of the poverty level qualify for a government health insurance plan. It provides limited dental coverage; however, it does include the application of sealants on permanent molar teeth. Access to dental services for GIP beneficiaries does not require a referral from their PCP. A significant proportion of children with private health insurance also have access to dental care.

One of the preventive measures usually included in their benefit packages are sealants for permanent molars.

In order to assess the number of third grade students who benefit from having sealants applied to their permanent molars, the MCH Division conducted an epidemiological study in 2007 designed to determine the prevalence of sealants in a representative sample 1,331 third grade students attending 57 public and private schools in 40 municipalities of the Island. The study was designed to gather additional data regarding the number of untreated and treated cavities and the absence of a primary molar tooth. In order to obtain information regarding their dental health hygiene habits and practices, parents of the participating children were asked to complete a questionnaire with the following variables: use of fluoridated paste, having had a dental visit within the past 6 months, age at first dental visit, sleeping habits, past history of dental caries, dental health insurance status and frequency of dental brushing.

The study concluded that the prevalence of dental sealants among third grade students in PR was 17.1%, which is less than the 29.5% reported US rate for children 6 to 11 years of age. Thus, we found available preventive measures such as sealants are underutilized despite wide dental health insurance coverage (94%) and that cavities were more frequent in children from low income families. Students from public schools and those holding a government sponsored health plan were less likely to have dental sealants.

This study identified being less than 5 years of age at the time of the first dental evaluation and presence of sealants were protective factors for cavities, and having the last dental visit more than six months ago and going to sleep with a bottle were risk factors. Results were shared with the UPR Dental School staff that collaborated in the study and presented during a poster session in the MCH Epi Conference.

All participating students received a brochure entitled "Healthy Smiles, Beautiful Smiles". It contains information geared towards promoting healthy oral habits and the use of preventive measures such as: starting regular dental visits early and frequent brushing using fluoride toothpaste. The brochure pays particular attention to the importance of using sealants to prevent cavity formation and promote tooth preservation. In addition, it stresses these services are included in the GIP insurance package. A total of 5,000 of these brochures were distributed.

During FY 2007-08, the Division of Oral Health Services visited 644 public and 68 private schools as well as 74 preschool learning centers and 73 summer camps. In total they were able to provide oral health education to 3,004 preschoolers, 98,625 children and 7,073 adolescents. In total they were able to reach 108,702 students. During their interventions, oral health professionals stress the importance of dental sealants to parents who attend the activities. They advise parents that dental services such as sealants are covered by the GIP and no PCP referral is required in order to access dental services. They also provide educational material with messages that promote healthy oral habits to prevent future dental disease and information on the oral health services included within the GIP package.

Home Visiting Nurses and Title V Community Health Workers promote the use of oral health services that are available through the GIP. During FY 2007-08, MCH staff offered 155 activities promoting oral health in the pediatric population. A total of 2,090 persons attended these sessions. Topics included were good oral health practices, preventing cavities and the benefits of having dental sealants.

Head Start 2008 report shows that dental cavities are the most prevalent health condition among their participants. Among Head Start children, 17.2% had dental cavities.

#### **Table 4a, National Performance Measures Summary Sheet**

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Raise awareness among elementary school children and parents about the importance of protective sealants.			X	
2. Disseminate educational materials concerning the importance of protective sealants.			X	
3. Disseminate the results of the recently completed oral health study among health professional and school staff so they can become aware of the importance of promoting behaviors and interventions to improve oral health.		X		
4. Include oral health referrals in the revised EPSDT schedule.				X
5.				
6.				
7.				
8.				
9.				
10.				

#### **b. Current Activities**

In 2008, the MCH Division convened a panel of experts to review local epidemiological data, and the Bright Futures recommendations in order to update current Preventive Pediatric Care Guidelines. The panel upon reviewing the results of the oral health study, current dental health insurance coverage and the availability of dentists willing to treat pediatric patients decided to recommend universal dental referrals for all children 12 months of age in the Revised Guidelines. In addition they suggested using the Caries Assessment Tool (CAT) as a tool to identify children at increased risk for caries and therefore should receive priority status for a dental evaluation. These Guidelines are being widely disseminated throughout the Island.

The MCH Division recognizes dental sealants is an underutilized preventive dental procedure and has charged its staff to actively promote its use. In addition the Division of Oral Health is also continuing their efforts to promote use of dental sealants and healthy oral health habits during their school visits. The importance of good oral health was one of the topics shared with 330 Center's Medical Directors and Administrators during the Academy of Medical Directors Annual Meeting.

A Center for Maternal and Child Oral Health has been established in the UPR Medical Center to treat pregnant women and their infants. Their staff recently offered our HVN a lecture on the topic of oral health promotion during pregnancy and the first two years of life.

#### **c. Plan for the Coming Year**

The results of the epidemiological study performed in 2007 will continue to be disseminated among oral health care professionals, pediatricians, child care providers and school officials. Efforts directed towards improving the oral health status of the maternal and child population will be centered on promoting healthy oral behaviors and the use of preventive interventions. We will work in two distinct but complementary directions. The first is to educate families and communities on good oral hygiene practices and to empower them to request preventive dental procedures currently covered under the GIP. As part of these efforts we will educate elementary school children and their parents regarding the availability of dental sealants as a measure to prevent dental cavities and the fact that the GIP plan includes this benefit. Promoting dental sealants among parents of low income children will be important since results revealed a disparity in dental sealant prevalence based on socioeconomic status. We will focus our efforts toward families visiting the WIC and Medicaid offices in search of assistance.



The second area is increasing the number of providers that are willing to treat young children. Currently, PR has a limited number of dentists specialized in treating pediatric patients and they are unevenly distributed throughout the Island. Therefore, in order to increase the number of preventive oral health interventions such as dental sealants that are administered, we must increase the number of general dentists that are willing to evaluate and treat young children. Currently, this issue is being addressed by the UPR School of Dentistry MCH Oral Health Clinic staff. They are inviting general dentists to attend a full day of in-service training in their clinic with the purpose of allowing them to acquire the knowledge and skills they need to feel comfortable treating small children.

The Division of Oral Health Services staff will work to increase the level of awareness among parents about the importance of having their children receive dental sealants. They will continue to visit public elementary schools to educate children on the good oral health practices and the use of dental sealants to prevent cavities.

Our MCH staff will work to promote messages directed at increasing the number of parents and children that adopt healthy oral habits and increasing awareness among parents that dental sealants are covered by the GIP and encouraging them to request their application when their school aged children visit the dentist. MCH staff will share this information when they participate in community and school based activities.

**Performance Measure 10:** *The rate of deaths to children aged 14 years and younger caused by motor vehicle crashes per 100,000 children.*

#### Tracking Performance Measures

[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

<b>Annual Objective and Performance Data</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
Annual Performance Objective	2.2	1.9	1.8	1.7	0.9
Annual Indicator	2.8	1.3	1.0	1.1	1.6
Numerator	24	11	8	9	13
Denominator	865067	851730	839172	825576	806246
Data Source					Death Certificate OITA
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Final	Provisional
	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
Annual Performance Objective	0.9	0.9	0.9	0.9	0.9

#### Notes - 2008

2008 Numerator: Data provided by the Office of Informatics and Technology Advances (OITA) of the Department of Health.

2008 Denominator: Population estimates of the US Census.

#### Notes - 2007

For source of information refer to 2006 notes.

Data provided for 2006. Vital Statistics data for 2007 is very preliminary. Data provided by Police and Institute of Forensic Science shows no significant change compared to 2006 data. Once 2007 data is final it is expected to resemble 2006.

#### **Notes - 2006**

Numerator Source: Office of Informatics and Technology Advances (OITA) of the Department of Health.

Denominator Source: US Census

#### **a. Last Year's Accomplishments**

For the past decade our vital statistics reports have had unintentional injuries as the principal cause of death for children 1-14 years of age. Most of them were the result of MVC. In 2008, preliminary VS reports reveal 10 deaths due to MVC in this age group. Among the 10 dead, six were males and 4 females. Three were less than four years of age; five were between the ages of 5-9 and two between 10-14 years of age. Seven were passengers and 3 pedestrians. During FY 2007-08, the Automobile Accident Compensation Administration (ACAA) data reported 9 deaths and 4,143 injuries related to MVC among children 0 to 14 years of age.

The PR Highway Safety Commission recorded 14 deaths due to MVC in 2008. Their report includes 8 deaths among those less than 5 years of age. One child was in the 5 to 9 year old category and 5 were in the 10-14 years of age range. According to their statistics half of these deaths occurred in pedestrians between the ages of 0-15.

One of the preventive measures being promoted locally with great success to reduce the risk of fatal injury in motor vehicle collisions is the use of lap/shoulder seat belts. In 2008, the National Highway Traffic Safety Report published PR rate of seat belt use had increased to 92.8%. This data is obtained from a probability-based observational survey following the methodology established by the NHTSA. This represents an 11.7% increase in seat belt use compared with 2001 when the reported rate was 83.1%. Only eight states and territories had percentages higher than PR.

The PR Traffic Safety Commission recognizes that Driving While Intoxicated (DWI) is the number one cause of fatal crashes in PR. They estimate between 40-50% of these events are alcohol related. In 2008, the NHSTA reported two fatalities in which the involved driver was alcohol impaired. Both deaths occurred in children under five years of age. To address this issue PR passed Law 22 in 2000. It reduced to less than .08% the permissible blood alcohol level for drivers. In addition, a law was approved that establishes a mandatory jail time for a driver carrying a passenger less than 15 years of age while intoxicated.

In the past, the Safe Kids Coalition has led local collaborative efforts to reduce the number of MVC deaths. Members of the SKC include several public and private entities such as the Police Department, the Highway Safety Commission, the Fire Department, PR Consumer Affairs Office, the Department of Education, EMSC and the MCH program, among others. The SKC holds several injury prevention activities around the Island mostly directed at the prevention on MVC fatalities. They include distribution of educational materials in health fairs, car seat security demonstrations, check points and inspection of cars seats for appropriate installation. During this past year, they conducted their traditional "Walk this Way" activity. This event is held to improve the traffic flow around a school in order to make it safer for students attending the school to enter and exit the facility. A school with pre-kinder to high school educational level was chosen. A total of 625 students, 1,250 parents, 70 staff members, among school teachers, administration and other services, and 38 representatives from other agencies, including Federal Express Mail Services, took part in the activity.

SKC also united efforts with "Babies are Us", a national initiative, to provide educational activities

on safety measures when buying toys, clothes and other articles for children. Six educational events about how to use infant car seats securely and prevention of unintentional lesions were carried out, reaching 635 persons.

The HSC held various community based activities directed at reducing MVC, among these, the Highway Safety Week. Their NSC certified safety coordinators offered lectures on highway safety and promoted compliance with current laws to public and private school students.

The MCH staff continually disseminates information directed at preventing MVC-related deaths. Perinatal nurses stress the importance of correctly using the car seat as they educate mothers whose infants are being discharged from the nursery. Several agencies loan or provide free car seats if requested. During FY 2007-2008, regional staff offered a total of 341 educational activities on the importance of using car seats, seat belts and highway safety rules to 3,073 participants.

**Table 4a, National Performance Measures Summary Sheet**

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Promote adequate use of child restraints as part of the anticipatory guidance given at the community level.			X	
2. Inform families with limited resources about local programs that rent or provide free infant car seats.		X		
3. Disseminate information to adolescents about MVC prevention and alcohol use as a contributing factor in MVC fatalities.			X	
4.				
5.				
6.				
7.				
8.				
9.				
10.				

#### **b. Current Activities**

Initial efforts to establish an Injury Surveillance System have been initiated by the PR Department of Health Epidemiology Office. They have established a collaborative agreement with the PR Department of Police and the Forensic Institute. They will provide the data needed to start a Surveillance System for Homicides, Suicides and Fatalities associated with Motor Vehicle Collisions.

This past year, two legislative pieces were presented with the purpose of further reducing MVC related deaths. HR #107 bill establishes that those convicted of driving while intoxicated must install a breath alcohol detector in their car ignition to prevent them from driving if alcohol level detected is more than .02%. Another legislative piece, HR #1242 has been submitted in order to prohibit the use of a cellular phone while driving.

The SKC recently notified the MCH Division that it lost the financial support needed to continue conducting their regularly scheduled activities.

Perinatal nurses stress the need to correctly and consistently use car seats beginning when they are discharged from the nursery. CHW conduct interventions to prevent MVC related injuries.

#### **c. Plan for the Coming Year**

The MCH Division will convene members that had participated in the SKC efforts to coordinate future collaborative efforts directed at reducing MVC fatalities using evidenced based strategies. Among those that will be invited to participate will be representatives of the Departments of Education, Police, Fire, Family Services, Emergency Medical Services for Children Program, HSC, PR Consumer Affairs Office, MADD PR chapter and ACAA. Collectively we will continue to promote the correct and consistent use of infant safety seats in parades, special public events and while conducting car seat check points near schools and in shopping malls.

MCH personnel will continue to provide educational activities that stress the importance of correctly installing and using car seats every time children travel in a motor vehicle and to promote compliance with, and enforcement of, laws that requires children be restrained while riding in a car, safety approved helmets are used correctly, and promoting drivers abstain from drinking and driving.

Perinatal nurses will receive a refresher course on how to correctly install and inspect car seats so they can continue to help parents whose infants are being discharged from the nursery use their car seats correctly. A special effort will be undertaken to provide the CSHCN population information regarding safe transportation and informing them of existing laws requiring child restraint and seat belt use. The MCH Division will support laws to increase the legal drinking age, lower legal BAC level, delay adolescents' ability to drive without supervision, establish a driver education course, prohibit the use of cellular phones while driving and the installation of alcohol detection devices in the ignition of cars of drivers convicted of DWI.

**Performance Measure 11:** *The percent of mothers who breastfeed their infants at 6 months of age.*

Tracking Performance Measures

[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

Annual Objective and Performance Data	2004	2005	2006	2007	2008
Annual Performance Objective			12.5	13	28
Annual Indicator		21.7	26.5	26.5	28.2
Numerator		89	185	185	248
Denominator		410	697	697	880
Data Source					ESMIPR
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Final	Provisional
	2009	2010	2011	2012	2013
Annual Performance Objective	29	30	31	32	33

**Notes - 2008**

Source of information from the 2008 ESMIPR (PRAMS like survey) from the MCH Program.

**Notes - 2007**

Data provided was obtained from the 2006 ESMIPR.

**Notes - 2006**

In 2005 we inadvertently reported for the annual indicator in this performance measure the value that corresponded to the percent of breastfeeding infants at 12 months of age. The correct value

for 2005 was 22 percent as reported in the narrative part. The data was provided from ESMIPR 2004. The 2006 data was obtained from the 2006 ESMIPR (PRAMS like survey) follow up telephone interview conducted by the MCH Division of the PR Department of Health six months after the initial postpartum survey.

#### **a. Last Year's Accomplishments**

Since the introduction in 1995 of public policy by the PRDoH to promote breastfeeding (bf), the MCH Program and the Bf Promotion Committee have consistently concentrated its efforts to provide women of childbearing age the support they need to breastfeed. In particular, the prenatal and immediate postpartum periods have been considered key stages for initiating and continuing bf at least throughout the entire infant's first year.

During the past years, several laws were enacted to protect the rights of bf mothers in PR. Among them, Law #155 of 2002 requires the existence of a furnished room for women who want to bf or store their expressed milk during labor hours in all workplaces that provide services to the public. Technical assistance to comply with this Law has been available through the MCH Division to those institutions that request it. Likewise, Law 79 of 2004 forbids staff at obstetrics and pediatric hospital facilities, child care centers and health provider's offices, from distributing formulas to newborns and infants without the mother's consent or a doctor's order. We distributed nearly 4,000 posters and 200,000 brochures regarding this Law to concerned individuals and facilities. Law 156 of 2006 ratifies women's rights to be informed about the benefits of bf and to receive needed support to initiate and continue this practice. Also, Law 239 of that same year increases to one hour bf time allowed for moms who want to bf or extract their milk in the work setting.

Bf rates have been monitored consistently since 2000 by the MCH Division through a PRAM's-like survey, called ESMIPR (Spanish acronym). This study collects facts on bf every two years using a self-administered survey to women in their immediate postpartum (pp) period, with follow-up telephone interviews to the same participants at 6 and 12 months after the initial interview. A constant increase in the number of women who bf has been documented since the survey began. According to 2006 ESMIPR findings, 68.6 % of participants breastfed immediately at birth, 26.5% continued at 6 months, and 13.2% at 12 months. An improvement was observed when comparing these results with those of the 2004 ESMIPR (64.5% at birth, 22% at 6 months, and 12% at 12 months). Data collection for the next ESMIPR survey began in Feb 2008.

Changes were introduced in the birth certificate in 2005, which included a question on bf practices. The results showed a slight increase in bf rates since that year on among women at the moment of registering their infants (2005 (69.9%); 2006 (69.0%); 2007 (70.6%); and 2008 (71.3%), 2007 and 2008 are provisional data.

Bf promotion continued through educational events at community level Island wide. During World Bf Week in Aug 2007, the Mayagüez MCH Region held its 5th Bf Fair, reaching 228 persons, among them pregnant and bf women. In May 2008, they carried out a major bf activity where 302 pregnant and bf women were present. Also, MCH staff provided 76 prenatal courses that include the topic on bf with the participation of 1,215 pregnant women and relatives. CHWs offered 372 group activities regarding bf where 4,439 persons took part, while 9 perinatal nurses did individual counseling and group events reaching 12,916 pregnant and pp women. During CY 2007, HVN gave individual education on bf to 6,390 pregnant women taking part in the HVP. Also, staff from MCH and WIC Programs joined up to organize 6 major events on the subject of bf, reaching 1,586 persons.

The DoH Bf Promotion Committee continued seeking strategies to increase the number of women who initiate and continue bf their infants from birth through their first 6 and hopefully 12 months of life. The Committee met 7 times. During this period, it studied the possibility of adding questions about bf in the PR Immunization Survey. This proved unsuccessful due to differences in carrying out the survey in PR. Also, the Committee started working on a document regarding bf

during emergency situations to be attached to the DoH Emergency Plan. Besides, members participated in 5 USBC-sponsored teleconferences aimed at enhancing alliances among fellow national coalitions. On Jan 2008, four members took part in the 2nd National Conference of State/Territory Bf Coalitions in Virginia.

The Committee also prepared a fact sheet with basic information on current laws in Puerto Rico regarding bf to be distributed to health care providers and at community level with the help of MCH staff across the island.

**Table 4a, National Performance Measures Summary Sheet**

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Continue monitoring breastfeeding tendencies in PR during immediate postpartum period and at the infant's 6 and 12 months of age by the collection of related data using the PRAMS-like Maternal and Infant Health Survey ESMIPR for 2008.				X
2. Establish partnerships with other government Programs and non-governmental groups to collect pertinent data related to breastfeeding practices among their participants.				X
3. Include breastfeeding-related topics as part of the prenatal courses aimed at pregnant women and their partners and relatives to be offered island wide.			X	
4. Continue increasing the knowledge at community level of the benefits of breastfeeding by providing group orientations.			X	
5. Continue providing educational activities and individual orientations to participants of the Home Visiting Program on the advantages of breastfeeding to elicit commitment among them with this practice.			X	
6. Continue joining forces with significant collaborators at public and private sectors, such as WIC Program and LACTA Project, in activities to promote breastfeeding at all levels.				X
7. Prepare a document regarding breastfeeding during emergency situations to be attached to the DoH Emergency Plan.				X
8. Summon the PR State Breastfeeding Committee at least every two months.				X
9.				
10.				

#### **b. Current Activities**

The Mayagüez MCH Region held its 6th Bf Fair to celebrate World Bf Wk in Aug 2008, where 311 persons took part. In March 2009, they carried out the 2nd Congress for Pregnant and Bf Women, reaching 165 persons.

Several bf women, accompanied by relatives, gathered at two sites in PR, to join at least 25 other nations in a World Synchronized Bf event on Oct 11, 2008.

MCH and WIC staff from the regions collaborated in 9 major bf activities across the Island, including pregnant and lactating women among the 1,538 participants.

So far, CHWs and perinatal nurses have continued promoting bf by individual counseling and group events. HVN have provided individual prenatal education on the subject to 6,527 women

participating in the HVP. To this date, 240 pregnant women and their partners have taken part in 10 prenatal courses that include the topic on bf.

The DoH Bf Committee met 6 times during this period. Its main achievement was completing the document "Infant Feeding in Crisis or Emergency Situations", a guide to assure bf practices during disaster events, to be attached to the DoH Emergency Plan. It will provide assistance to emergency response personnel when they come in contact with bf mothers and their infants. Members of the Committee also took part in 6 USBC teleconferences aimed at providing state coalitions with new approaches to enhance bf practices in their communities.

2008 ESMIPR partial results for bf at birth and at 6 months were 68% and 28.2% respectively.

### **c. Plan for the Coming Year**

For the coming period, the MCH will continue endorsing bf practices and public policies that assure bf rights at all locations, particularly in hospital settings.

Our main focus will be on encouraging the establishment of mother-and-baby friendly hospital facilities. To attain this, the Bf Committee will collaborate with the MCH Division by developing a pilot project to be implemented at two or three hospitals in the Metropolitan area that are receptive to the idea. Barriers such as negative attitudes among employees toward this practice will be addressed and, hopefully, removed from the hospital setting. We will eventually engage in starting the project at other hospital locations across the island. With this strategy we expect to see an increase in bf rates during the early pp period and throughout the infant's first 12 months of life.

Health care providers and the community will be continually informed of the existing laws and policies regarding bf in PR. A portfolio containing copies of current laws, and a fact sheet with a brief summary of each law, will be distributed to the MCH regional programs to be used as an educational tool at community level. Also, we will continue to develop and distribute educational material to comply with certain laws, such as Law 79 of 2004, and Law 156 of 2006, which require its public dissemination through these means.

The MCH Division will continue collaborating with key partners, such as WIC Program and LACTA Project, during their bf promotion activities.

Perinatal nurses will continue promoting bf during group activities and individual interventions in the hospital scenery. Likewise, communities across the island will benefit from bf educational activities by CHWs. HVN will continue providing one-on-one prenatal education on the benefits of bf to HVP participants.

We will provide bf information to health providers in PR via the MCH Health Status Book, and through the DoH web page, emphasizing the progress we have made toward increasing bf rates in the island. Prenatal and perinatal specialists, pediatricians, and nurses will benefit particularly from this strategy.

**Performance Measure 12:** *Percentage of newborns who have been screened for hearing before hospital discharge.*

Tracking Performance Measures

[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

<b>Annual Objective and Performance Data</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
--	-------------	-------------	-------------	-------------	-------------

Annual Performance Objective	15	50	80	90	98
Annual Indicator	25.3	74.5	85.0	97.5	97.9
Numerator	12989	37774	41425	44965	44245
Denominator	51239	50687	48747	46096	45193
Data Source					PR Hearing Screening Program
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Provisional	Provisional
	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
Annual Performance Objective	98	98	99	99	99

#### Notes - 2008

Data for 2008 provided by the Hearing Screening Program from the Puerto Rico Health Department.

#### Notes - 2007

Denominator: The number of births reported for 2007 is based on the number of births registered in the Demographic Registry Office through the Inscriptions Report. The annual performance objectives for 2008 to 2011 were revised. Annual performance objective for 2012 was added.

#### Notes - 2006

Denominator: The number of births reported for 2006 is preliminary and is based on the number of births registered in the Demographic Registry Office. The annual performance objectives for 2007-2011 were revised.

#### a. Last Year's Accomplishments

One of our objectives last year was to maintain or increase above 97.5% the percentage of newborns screened for hearing loss and to monitor follow up services for identified newborns. The percent of screened newborns increased from 97.5% in 2007 to 98% in 2008. Data for 2008 indicated that 44,245 out of 45,193 newborns were screened for hearing loss and, of these, 1,087 (2.5%) were identified with possible hearing loss. The increase in the percentage of newborns screened for hearing loss before hospital discharge in PR may be explained by several factors. The CSHCN Section of the PRDOH has been very active in promoting birthing hospitals to comply with Law #311 and Regulation #114 enacted on 2003 and 2004, respectively. The Service Coordinator and the Audiologist visited participating hospitals to provide education about both the law and regulation and to inform them about their responsibilities in screening and reporting cases to the PRDOH. The Service Coordinator and Program Coordinator has been providing consistent follow-up to hospitals in reporting the cases on a monthly basis.

Another objective was to increase the number of children identified by hearing screening tests who received diagnostic testing by 3 months, and treatment before 6 months of age. During 2007, 378 of 1,027 identified babies (36.8%) were contacted for follow up. During 2008, 576 families out of 1,087 identified babies were contacted (53%). From the total number of contacted families (576), 358 (62%) cases were closed. Of these, 152 (26%) had normal hearing results; 205 (36%) were closed to several reasons including incomplete or erroneous demographical data, loss of contact, parents' denial to continue the process, and parents moving to the US, among others; and only one (0.17%) was identified with hearing loss.



CANU Online system was the principal mechanism used to monitor if identified newborns received timely follow up services for diagnostic testing. During 2008, 38 of 40 birthing hospitals entered data into the tracking system and 39 audiologists were registered in CANU Online. The UNHSP gradually increased follow up monitoring with the collaboration of the Service Coordinator. The UNHSP actively encouraged and trained community audiologists and birthing hospitals to use CANU Online for follow-up data entry. Additionally, the program webpage was updated.

The UNHSP has participated in various educational events to raise awareness about the importance of newborn hearing screening in the general population. The program was very active during the Audiology Month (May 2008). The Program participated in a local TV Program called: "Entre Nosotras" and a local radio program called "Despertando el Mundo" to provide information on the UNHSP and the importance of newborn hearing screening, diagnosis and follow-up services.

**Table 4a, National Performance Measures Summary Sheet**

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Provide follow up tracking to increase the number of newborns who have the audiologic evaluation before three months of age.		X		
2. Develop promotional activities to create awareness of UNHSP in the general population.		X		
3. Supervise UNHSP in hospitals to maintain high quality services.				X
4. Provide information about UNHSP to stakeholders that include hospitals, audiologists, speech language pathologists, nurses and physicians.				X
5. Collaborate in the implementation of the UNHSP programs at all birthing hospitals in PR.				X
6. Increase the use of the UNHSP CANU Online data tracking system by audiologists to document follow up services.				X
7. Update the UNHSP program website to provide information regarding the UNHSP Program.				X
8.				
9.				
10.				

#### **b. Current Activities**

Promotional and educational activities are being implemented to raise awareness among the general population and health professionals regarding the existence of the UNHSP, laws and regulations.

In October 2008, the UNHSP completed the educational promotional campaign and the distribution of materials to participating hospitals and to Pediatric Centers. During November and December 2008, the program participated on a local radio program from the Sagrado Corazón University; a health fair sponsored by the San Pablo Hospital and published an article in the Metropolitan Hospital magazine about risk factors for hearing loss and audiologic follow-up timelines. The UNHSP is working to increase the level of cultural competence by translating its webpage to English.

Statistical data is currently obtained only through manual records while the system is being improved. For 2009, the percent of screened newborns is expected to remain at the current level

of 98%. Some of the barriers we are currently working on to increase the use of CANU Online are the lack of access to Internet in nursing areas and inadequate computer skills of hospital staff. These barriers affect the hospitals' and community audiologists' decision to adopt CANU Online. However, the program continues to identify strategies that may facilitate their use of this service.

A family advocate is currently in the recruitment process to assist the Service Coordinator in the follow-up activities.

### **c. Plan for the Coming Year**

The UNHSP will continue its efforts to increase the number of children identified by hearing screening tests who receive appropriate follow up services. To achieve this, the Program will attempt to implement the strategies recommended by the National Initiative for Child Health Quality (NICHQ) learning collaborative, as they were found to be effective in reducing the number of infants and families that are lost to follow up.

Promotional and educational activities will continue to raise awareness among the general population and health professionals of the UNHSP reporting requirements, laws, regulations, procedures and protocols. The UNHSP will also publish an article in newspapers with information about the Program goals and its achievements. In addition, an annual stakeholders meeting will be held for all those who participate in the UNHSP to maintain and improve quality control.

A workshop will be offered to Audiologists about ABR and hearing aid protocols for the pediatric population to emphasize the best protocol for early intervention. The UNHSP will actively work to encourage audiologists to enter follow-up services data into the CANU online electronic system in order to have complete statistical data about prevalence of hearing loss in the pediatric population. This statistical data is expected to keep stakeholders informed to improve the quality of newborn hearing screening programs at hospitals and audiological evaluation and diagnostic services. The UNHSP is currently working with the PRDoH Office of Informatics and Technologic Advances (OIAT) to improve the CANU online electronic system to obtain complete and accurate statistical data.

Another goal to achieve this year is to provide information to health insurance companies about Law #311, 2003 (Law of Universal Newborn Hearing Screening) and their obligation to include newborn hearing screening tests and audiological evaluations as part of the health benefit package.

The Program will seek collaboration with the Demographic Registry in order to be able to corroborate if newborns were screened for hearing loss before hospital discharge. This information will help the Program to improve the follow-up of babies not screened and to improve statistical data. Additionally, the Program will contact WIC offices to reinforce the importance of audiological follow-up among participants. The Program will request the PR Society of Pediatricians resources to reach the pediatricians and inform them about their role on early hearing loss detection.

### **Performance Measure 13:** *Percent of children without health insurance.*

#### **Tracking Performance Measures**

[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

<b>Annual Objective and Performance Data</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
Annual Performance Objective	1	1	1	1	0.3
Annual Indicator	1.3	1.6	0.3	0.4	0.4

Numerator	15136	18384	3407	4522	4319
Denominator	1164353	1149039	1135559	1121697	1104427
Data Source					PR Head Start Prog. and US Census
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Final	Provisional
	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
Annual Performance Objective	0.3	0.3	0.3	0.3	0.3

#### **Notes - 2008**

Data from 2008 provided by the Puerto Rico Head Start Program and the US Census Bureau.

#### **Notes - 2007**

Updated data for 2007. For source of information refer to 2006 notes.

#### **Notes - 2006**

The estimate for this performance measure was done using the Head Start health insurance data. According to this data, 0.34% of enrolled children did not have a health insurance plan. We assume that Head Start children are low income children in Puerto Rico. They represent the maximum number of children without health insurance. The denominator was the population estimation (0-19 years old) as of July 2006 and was obtained from the US Census Bureau.

#### **a. Last Year's Accomplishments**

As of July 2008 the Puerto Rico Census Office estimated that 1,104,427 children and adolescents 0 to 19 years old lived in Puerto Rico. Our best estimate of the proportion of children without health insurance comes from data gathered from children enrolled in Head Start. These children are mainly from a low socioeconomic background and can be used as a proxy to estimate the number of children without health insurance in Puerto Rico. An evaluation of the health coverage of 40,662 preschool children enrolled in the Head Start Program during FY 2008-2009 demonstrated that 81.6% held the GIP; 18.2% had a private health plan; and only 0.39% (159) did not have a health insurance plan. Based on these results, we estimate that approximately 3,861 children and adolescents do not have a health insurance plan in Puerto Rico.

The Alliance for Healthy, Active and Well Nourished Children (AHAWNC) efforts to conduct the first phase of a study that will allow us to estimate the prevalence of overweight and obesity in children included in a representative sample of second and fifth grade students attending public and private schools in Puerto Rico. As part of the study, a questionnaire to gather information regarding their eating habits and physical activity level of the child and his/her family was distributed; it also included a question that allowed us to determine their health insurance status. According to preliminary data gathered in 1,076 second and fifth grade students, 47.8% held the GIP; 50% had a private health plan and 2.2% did not have a health insurance plan.

This low uninsured rate may be explained by the fact that all children under 19 years of age living in families with incomes below 200% SPL are eligible for the GIP. In addition, PR families will take extreme measures and make economic sacrifices in order to provide health insurance for their children. Frequently, young children are included in other family member's health insurance plan, particularly in cases where parents are uninsured and cannot afford to have health

insurance.

The health insurance status of the Home Visiting participants is evaluated by the HVN. A total of 114 women received a referral to the Medicaid Program and 143 children 2 years old or less were uninsured and were referred to the Medicaid Program.

**Table 4a, National Performance Measures Summary Sheet**

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Conducted outreach activities to identify children without health insurance and they were referred to Medicaid for evaluation and qualification.		X		
2. Obtained information regarding the health insurance status in a random sample of students attending 2nd and 5th grades, in public and private schools in PR who will participate in a study to determine the prevalence of obesity.				X
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				

**b. Current Activities**

MCH Program staff, particularly the CHWs, devote most of their work days to performing outreach activities in health fairs, school venues and at the community level. They are constantly trying to identify pregnant women, children and adolescents with no health care insurance and ensuring they receive GIP insurance benefits if eligible. During this year our 57 CHW's continued to identify Medicaid eligible children and link them with the Medicaid offices closest to their homes.

Determining the health insurance status of Home Visiting Program participants and their family members is one of the first tasks the 94 HVN's perform when they enroll new clients into the HVP. Those without insurance receive an immediate referral to the Medicaid Program.

During the last semester of the 2008-2009 school year the Alliance for Healthy, Active and Well Nourished Children will continue the study that will estimate the prevalence of overweight and obesity in children in a representative sample of eight and eleventh grade students in private and public schools in Puerto Rico. With the questionnaire we expect to estimate the prevalence of adolescents in these grades without health insurance.

**c. Plan for the Coming Year**

The MCH Program, CHW's and HVN's will continue reaching out to children and families without health care insurance and provide them with referrals to the Medicaid Program.

The MCH Program will receive the Puerto Rico Health Survey (PRHS) database from 2001 to 2003. These data will allow us to estimate the prevalence of uninsured children in Puerto Rico. Other factors such as morbidity and hospitalization, school absenteeism and physical health

status will be evaluated by comparing uninsured children with insured. Although this database is for 2001 to 2003, it has never been analyzed for this objective and even though it is a secondary source of information; we expect it can provide us valuable information about uninsured children in Puerto Rico.

**Performance Measure 14:** *Percentage of children, ages 2 to 5 years, receiving WIC services with a Body Mass Index (BMI) at or above the 85th percentile.*

Tracking Performance Measures

[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

Annual Objective and Performance Data	2004	2005	2006	2007	2008
Annual Performance Objective			13	39	38
Annual Indicator		40.3	41.6	39.7	39.0
Numerator		40159	35112	30647	38372
Denominator		99649	84388	77219	98391
Data Source					PR WIC Program
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Provisional	Provisional
	2009	2010	2011	2012	2013
Annual Performance Objective	37	36	35	34	34

**Notes - 2008**

Data for 2008 calculated based on data provided by PR WIC Program of the Department of Health for the period of January to December 2007.

**Notes - 2007**

Data for 2007 calculated based on data provided by PR WIC Program of the PR Department of Health for the period of October 2006 to September 2007.

**Notes - 2006**

Data provided by the PR WIC Program of the PR Department of Health.  
Data for 2006.

**a. Last Year's Accomplishments**

PR has experienced an increase in the prevalence of obesity in the population and physicians have noted an increase in DM type 2 in the pediatric population. According to the 2008 BRFFS, 65.1% of adults in PR have a BMI over 85%. Revised 2008 WIC program data reported 39.0% of children ages 2-5 enrolled in their clinics had BMI's at or above the 85th percentile.

In 2005, a study was conducted to measure the prevalence of overweight and obesity among a representative sample of 3,026 second graders attending public and private schools in PR. This study was conducted by representatives of the MCH Division, Department of Education, WIC, College of Physicians Medical Foundation, AAP, Nutrition Internship Program, School of Public Health and the Private Education Association. The participating students had their BMI calculated and afterwards the students were classified accordingly. Results showed 24% of second grade students had BMI's above the 95%; 16% had levels between 85-94%. Only 2.7% of the students

were underweight. No statistical difference was noted by type of school, age or sex. The results showed the PR prevalence rate was higher than that reported by CDC (16%) for children in a similar age group living in the US, but only slightly higher than observed among Hispanic children living in large urban areas in the US.

During 2007-2008, results continued to be widely disseminated in several professional forums, media, private and public organizations in order to create awareness of the severity of the problem in PR.

On December 2007 the "Niños y Jóvenes Saludables, Activos y Bien Nutridos" Alliance was officially established after representatives of government agencies, representatives of the academia and other private entities were able to agree on a shared vision, mission and main working strategies. In addition, the Alliance elected its first Board of Directors and established three workgroups: Investigation, Education and Public Policy. The MCH Program Coordinator was selected Leader of the Investigation Workgroup. She was also made responsible for overseeing the pediatric aspects of the Alliance work.

Two executive orders, OE-2006-33 and 34, signed by the Governor, provided \$7.8 million to 72 municipalities to help them hire the staff (nutritionists and physical activity trainers) needed to establish a wellness program at the community level. Additional staff was hired to establish the infrastructure needed to develop, implement and evaluate this program known as "PR en Forma".

The PR Commission on Nutrition met regularly to culturally adapt the food pyramid for use with our local pediatric population.

Several weight control programs have been developed locally. The WIC Program replicated the interventions used by the Caguas pilot project in the Bayamón, Metro and Fajardo Regions. The project was directed at 3-4 years old WIC participants who had BMIs above the 85th percentile and their parents. The project provided parents five 2-hour didactic sessions on behavior modification techniques and how to improve their child's nutrition. Also, children had the opportunity to exercise during these 2 hours.

During the school year 2007-08, the Transformer Club, a strategy developed by a Mayagüez MCH staff member, was implemented in 88 schools. This after-school program was implemented in four Department of Education Regions. It was made possible because of the collaborative effort between the Departments of Health, Sport and Recreation and Education. The Initiative strived to help severely overweight middle school children achieve a healthy weight by providing them opportunities to increase their physical activity level and motivating them to modify their diets and adopt healthy lifestyles.

Our HVN and CHW have promoted healthy eating during their daily activities. During FY 2007-08, they offered 330 activities to promote physical activity and healthy eating as part of the efforts to prevent childhood obesity. A total of 2,521 persons participated in them. In addition, they promoted breastfeeding on 372 separate educational activities attended by 4,439 persons. The topic of adequate nutrition in the pregnant and adolescent population was offered on 35 different occasions and reached 590 persons.

**Table 4a, National Performance Measures Summary Sheet**

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Establish an Alliance with the purpose of educating, designing and performing applied research and developing public policy to reduce the prevalence of childhood obesity in PR.				X
2. Design a study to measure the BMI of a representative sample				X

of students attending grades 2, 5, 8 and 11 in PR, and administer a questionnaire that will help identify their dietary intake and physical activity.				
3. Establish the baseline work needed to conduct an ethnographic study in the municipality with the highest prevalence of childhood obesity to identify social and cultural variables that contribute to the problem.				X
4. Provide WIC the technical assistance they requested to evaluate the results of their project aimed at intervening with participants with BMI at or above the 85th percentiles.				X
5. Increase communication and collaboration among governmental, private and non profit agencies that are developing research and implementing interventions for the reduction of overweight in children.				X
6. Educate journalists, communicators, media, community representatives and the public at large on issues related to pediatric obesity and encourage healthy eating and daily exercise.			X	
7. Collaborate with other PRDoH secretariats and agencies in their obesity prevention efforts and health promotion activities.				X
8. Collaborate in the elaboration of a public policy to improve the nutritional status and increase the level of physical activity our children and their parents have.				X
9.				
10.				

#### **b. Current Activities**

The three Alliance workgroups have continued to meet and work toward reaching their goals. The Investigation, Evaluation and Surveillance Group's is conducting a study to measure the BMI of a representative sample of students attending grades 2, 5, 8, 11 in public and private schools in PR. As part of the study a questionnaire was developed to help identify students' dietary intake and physical activity. It has been completed by the parents of 2nd and 5th graders and by students in the 8th and 11th grade participating in the study.

The first phase lasted from November 2008 thru January 2009. During this time 1,076 second and fifth grade students attending 49 public and private schools were evaluated. The second phase began in March of 2009. It will obtain information from 8th and 11th graders. The data entry phase has been initiated. An ethnographic study to identify social and cultural variables that contribute to the high prevalence of obesity in Gurabo is under way.

The PR adaptation of the Food Pyramid for the Pediatric Population was officially launched in a press conference held in March 2009.

Our staff continues to promote physical activity, healthy eating and breastfeeding at the community level and during their home visits. During FY 2007-08, 9,310 persons participated in 940 topic related activities. This year 447 persons participated in the Fourth HS Participants Committee Encounter which was devoted to promoting healthy eating and physical activity.

#### **c. Plan for the Coming Year**

Once the data gathering, entry and preliminary analysis phases of the study are completed the members of the Alliance Investigation Subcommittee will be convened to help in the final analysis and interpretation of the results. Based on their conclusions and recommendations a strategic plan will be developed to address the risk factors identified. Results of the study will be widely

disseminated to the general public and to all those agencies that can help implement the strategic plan.

It has been widely recognized that no agency alone can help curtail this increasing trend in pediatric obesity; therefore, a public policy has been drafted by the Alliance Subcommittee on Public Policy. It establishes that the local response to this epidemic will be addressed by officially establishing an Alliance. It will be responsible for developing a five year strategic plan to stabilize and then reduce the pediatric obesity rates. It will be in charge of facilitating a coordinated response to address the problem in order to maximize scarce resources and to prevent duplicity of efforts. This draft establishes the roles and responsibilities of each participating agencies and institutions will assume once it is finally approved. To insure buy in and compliance with this public policy it has been sent to the recently appointed agency heads for their revision and commentaries. Once all their input and recommendations are taken into consideration it will be submitted for the governor's signature.

The Alliance Education Sub Committee will continue to meet and partner with other key stakeholders to disseminate messages regarding the need to increase physical activity and healthy eating habits. The MCH Division will monitor all of the Alliance activities that are relevant to the pediatric population.

The qualitative study "Low-Income Parents' Perceptions and Behaviors Related to Childhood Eating and Physical Activity: An Ethnographic Assessment of the Gurabo Municipality" has concluded the preliminary work associated with the study. Its design and study protocol has been approved by the UPR Medical Sciences Campus IRB. In addition, key informants, participating communities and the investigation assistants have been selected. During the 2009 summer a series of focus group will be held in order to help define the social, cultural, economic and ethnographic factors that contribute to the elevated overweight rate. Study results will be shared will the Alliance and all those interested in resolving the problem. This new information should help guide any changes needed in the strategic plan.

Now that the Pediatric pyramid has been launched and made public our staff will become actively involved in its dissemination and will promote compliance with its recommendations. Our staff will continue to promote physical activity, breastfeeding and healthy nutrition during their home visits and community based activities as strategies that prevent childhood obesity.

**Performance Measure 15:** *Percentage of women who smoke in the last three months of pregnancy.*

Tracking Performance Measures

[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

<b>Annual Objective and Performance Data</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
Annual Performance Objective			2.7	2.6	1.4
Annual Indicator		2.0	1.6	1.1	1.1
Numerator		20	31	20	20
Denominator		1004	1904	1876	1876
Data Source					ESMIPR
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Final	Final
	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>



Annual Performance Objective	1.4	1.4	1.4	1.4	1
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#### **Notes - 2008**

Data obtained from the 2008 ESMIPR Survey (PRAMS like adapted version), which is conducted by the MCH Program of the PR Department of Health.

#### **Notes - 2007**

Data obtained from the 2008 ESMIPR Survey (PRAMS like adapted version), which is conducted by the MCH Division of the PR Department of Health.

#### **Notes - 2006**

Data obtained from the 2006 ESMIPR Survey (PRAMS like adapted version), which is conducted by the MCH Division of the PR Department of Health. Data reported last year, corresponds to ESMIPR 2004 Survey.

#### **a. Last Year's Accomplishments**

The "PR Maternal and Child Health Study" (ESMIPR, Spanish acronym) is a PRAMS-like surveillance study carried out every two years by the MCH Division. In the 2008 survey, 1,876 women were interviewed in the immediate post partum period. The prevalence of tobacco use among pregnant women was 2.0% at any time and 1.1% in the third trimester. Of the women who reported smoking at any point during pregnancy, 57.1% (20 women) continued to do so in the last trimester of pregnancy, distributed as follows: 15 (42.9%) smoked fewer than 10 cigarettes per day, 4 women (11.4%) smoked 10-20 cigarettes per day, and 1 (2.9%) smoked more than 20 cigarettes per day. Since the 2002 survey, the prevalence of smoking in the last 3 months has followed an overall downward trend (statistically significant), namely: 2002 (1.8%); 2004 (2.0%); 2006 (1.6%); and 2008 (1.1%).

Among pregnant Home Visiting Program (HVP) participants screened in 2008, 49 reported smoking during pregnancy. Of these, 46 (93.8%) stopped smoking or significantly reduced their use of tobacco, and 3 (6.2%) participants continued smoking at the same rate.

For 2008, preliminary birth certificate data show 0.03% of new mothers report using tobacco in the 3 months before pregnancy and 0.02% do so in the first, second and third trimesters. In contrast, the 2007 BRFSS revealed that 7.9% of all women smoked every day or some days (pregnancy status was not ascertained).

The Home Visiting Nurses (HVN) continue implementing the smoking cessation program that was designed in 2001 under the sponsorship of AMCHP's Tobacco-Free Futures Mini-Grant. It is based on the USPHS Guidelines for Smoking Cessation and uses DiClemente and Prochaska's Transtheoretical Model as the basis for designing the most appropriate intervention. The "Perfil de la Participante" (Participant's Profile) is the instrument designed to collect information regarding smoking status, to determine addiction severity, susceptibility to change and level of motivation and support. The information gleaned from this instrument allows the HVN to tailor the educational content and the motivational intervention. The self-help diary "Mi Gran Decisión" is used as a complement to the HVN's intervention and is meant to guide the participant through a seven-day quitting process.

In addition to this program, HVNs stress the importance of avoiding environmental tobacco smoke (ETS) for women who, although not smokers themselves, live or spend time with smokers. Orientation and education are offered to these women on an individual basis, and educational materials reinforcing the information are distributed to them.

Educational materials regarding both smoking and exposure to ETS are distributed in health fairs and other community education activities. In FY 2007-08, a total of 300 educational activities on ETS and smoking prevention were carried out, reaching 4,283 participants.

The "Comenzando Bien" prenatal education curriculum, developed by March of Dimes, was offered to pregnant women throughout the island by specially trained and certified facilitators. One of the topics covered in this program is use of tobacco in pregnancy. In 2008, 16 sessions of the "Comenzando Bien" program reached 286 participants, including pregnant women and their partners or other support person.

In December 2004, the Department of Health established an island-wide, toll-free smoking quit line. In 2007, the quit line assisted 1,167 smokers (66.6% were women and 69.3% were 16-51 years old).

On March 2, 2007, changes to Law #40, the Law to Regulate Smoking in Public and Private Places, took effect. This comprehensive law prohibits smoking in all workplaces, businesses, private and public spaces. Law #21, signed 2/29/2008, requires all health insurance companies to cover smoking cessation methods and products for their enrollees.

**Table 4a, National Performance Measures Summary Sheet**

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Share information of the ESMIPR survey with concerned individuals.				X
2. Screen HVP participants for tobacco use and provide management according to the level of risk.	X			
3. Update providers' knowledge regarding screening and management of tobacco use during pregnancy.				X
4. Include the topics of alcohol, tobacco and illicit drug use in patient orientations.			X	
5. Disseminate educational materials on adverse effects of high risk behaviors during pregnancy.			X	
6. Increase public awareness of poor birth outcomes associated with risky behaviors.			X	
7. Promote the use of the Quit line among WCBA.			X	
8.				
9.				
10.				

#### **b. Current Activities**

HVNs continue to implement the smoking cessation program. Educational materials are distributed at the community level. The effects of smoking on the fetus are covered in educational activities for pregnant women. As of 2009, we no longer use the March of Dimes "Comenzando Bien" prenatal curriculum; instead, we have developed a local version that is more pertinent to our participants in both content and format. The annual "No Smoking Day" march in Arecibo had over 350 participants, including general public, pregnant women and children.

The Administration for Children and Families (ADFAN) of the PR Department of the Family continues to implement its Home Visiting Program. Their HVNs implement the tobacco use screen and the Smoking Cessation guide, as trained by the Healthy Start staff.

According to the 2008 ESMIPR, 2.0% (38) of 1,876 respondents smoked at some point during pregnancy and 1.1% (20) continued to do so in the last trimester. These figures are slightly lower than reported in 2006.

The interagency Tobacco Coalition continues smoking cessation promotion activities. In 2008, the quit line assisted 1,137 smokers; 54% were women, and 317 were women ages 44 and under.

Only 8 women (0.7% of the total) reported being pregnant at the time of the call. The quit rate for the help line is approximately 35% over the years it has been in existence.

### c. Plan for the Coming Year

HVNs will continue to screen all Home Visiting Program participants for tobacco use and provide management according to the level of risk. HVNs will continue to pay special attention to women who quit smoking during pregnancy to avoid a postpartum relapse.

CHWs will also continue to include the topics of alcohol, tobacco and drug use in educational activities and individual orientations during their interventions in the community. These topics will be covered in depth during the prenatal and parenting courses and other educational activities.

The SSDI is undertaking an evaluation of the impact of the implementation of the revised 2005 Birth Certificate on data availability and accuracy. One of the areas that will be closely monitored is the report of maternal smoking. The results will be compared to other smoking data sources such as ESMIPR, and the BRFSS. We expect to complete the study by the end of 2009.

### **Performance Measure 16:** *The rate (per 100,000) of suicide deaths among youths aged 15 through 19.*

#### Tracking Performance Measures

[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

<b>Annual Objective and Performance Data</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
Annual Performance Objective	3	2.5	1.5	1	1
Annual Indicator	2.7	2.0	2.4	2.4	3.0
Numerator	8	6	7	7	9
Denominator	299286	297283	296387	297823	298181
Data Source					Death Certificate OITA
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Provisional	Provisional
	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
Annual Performance Objective	1	1	1	1	1

#### **Notes - 2008**

Updated data for 2007.

2008 Numerator: Data obtained from the Office of Informatics and Technology Advances (OITA) of the Department of Health.

2008 Denominator: Population estimates of the US Census.

#### **Notes - 2007**

Updated data for 2007, number of events is less than 5 cases. For source of information refer to 2006 notes.

## **Notes - 2006**

Numerator: Office of Informatics and Technology Advances (OITA) of the Department of Health.  
Data for 2006 is preliminary.

Denominator: Population estimates of the US Census for 2006.

### **a. Last Year's Accomplishments**

During FY 2007-2008, the MCH staff held 90 educational activities on the signs and symptoms associated with suicidal ideation as well as prevention of adolescent suicide in five health regions. A total of 1,661 persons participated in the activities. The MCH staff also carried out activities related to the mental health of adolescents. These activities included 397 presentations on adolescent self-esteem reaching 8,120 persons and four workshops on the topic of how adolescents can face and handle their emotions with 96 participants. Twelve MCH staff -- Comprehensive Adolescent Health Services (known as SISA, Spanish acronym) and Healthy Start programs -- attended a presentation given by PR Commission for Suicide Prevention (PRCSP) on how to identify signals of suicidal behavior in the adolescent population and general guidelines on how to intervene in these situations. Ten SISA program staff attended a follow-up training to enable them to identify the level of risk for suicide youth are showing and appropriate intervention techniques according to the risk level.

The ASSMCA Mental Health Support Line PAS (Spanish Acronym for First Psychosocial Aid) crisis toll free hotline reported an increase in the calls received for information, assistance and help on life situations affecting mental health from 34,400 in 2006 to 102,695 in 2007. This increase in the number of calls is related to public awareness due to presentations, media campaigns and distribution of suicide prevention materials in the eight health regions. The PAS program also offered 49 educational activities on suicide prevention and crisis intervention attended by 4,499 persons -students, teachers, parents, social workers, health professionals, school counselors, police, community leaders, faith leaders, and the general public. Of these activities, 17 were held in elementary, middle and high schools and a total of 244 students, 18 parents and 341 teachers participated.

The SISA program completed, pilot tested and evaluated six training Positive Youth Development (PYD) modules directed at adults working with youth. Eight health professionals from the PR Department of Health attended the pilot trainings. The SISA program revised the "Abracemos La Vida" (Let's Embrace Life) module, which is part of the training program for middle-school students participating in the school-based Youth Health Promoters Project. The module will provide youth health promoters with tools to achieve a healthy life including how to face and manage difficult life situations, anger, anxiety, loss and sadness.

The MCH Division contracted the Naranjito Youth Program, Inc., a community-based organization, to establish a pilot Positive Youth Development project in the municipality of Naranjito to promote healthy lifestyles among youth in community contexts.

The PR Commission for Suicide Prevention (PRCSP) of the PRDoH, composed of representatives of state agencies and non-profit non-government organizations, distributed "Para Salvar Vidas" (To Save Lives) toolkits targeted at the adult and adolescent population. The kit contains information on crisis intervention services, signs and behaviors associated with suicide in adolescents and adults, and ways to handle these situations. During 2007, the Commission distributed 75,410 information materials that included "To Save Lives" kits, posters and pocket cards. During the reporting period, the Puerto Rico Commission for Suicide Prevention (PRCSP) offered 96 suicide prevention activities targeted at the public general. The Commission also held 24 suicide prevention workshops and presentations directed to social, legal and health professionals. The PRCSP sponsored the National Suicide Prevention Day held in August 2007. It also offered an activity for religious leaders of diverse denominations. Due to administrative changes, the number of participants in the activities is unavailable. The PRCSP also participated in mass media communication programs: 45 radio programs and 11 television programs. It also

held 16 press interviews published in the four most important newspapers in Puerto Rico. In addition, the PRCSP published a Supplement to Prevent Suicide on December 5, 2007 in one of the leading newspapers on the Island, with 1,900,000 readers. The Commission also provided technical assistance to universities and health institutions on suicide signals, symptoms and prevention.

**Table 4a, National Performance Measures Summary Sheet**

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Analyzed available VS and other data sources on suicide prevalence by geographical areas.				X
2. Contracted the Naranjito Youth Program, Inc. to conduct a community-based Positive Youth Development pilot project in the municipality.				X
3. Increased awareness of the signs and symptoms associated with suicidal ideation by distributing educational materials and providing group orientations and presentations.			X	
4. Revised the “Abracemos La Vida” (Let's Embrace Life) module in the school-based Promotores de Salud (Youth Health Promoters) project.				X
5. Pilot tested and evaluated six training Positive Youth Development modules directed at adults working with youth.				X
6. Distributed the “To Save Lives” kits developed by the Commission for Suicide Prevention.			X	
7. Promoted among the public and professionals the use of the PAS (First Psychosocial Aid) hotline.			X	
8.				
9.				
10.				

#### **b. Current Activities**

The MCH staff at the regional level continues to hold activities related to the mental health of adolescents. As of today, 109 activities on self-esteem have been offered to a total of 2,858 participants. The MCH staff also held 32 activities on how adolescents can manage their emotions reaching 633 teens of both sexes. The PAS hotline continues receiving calls for crisis intervention, information on suicidal signs and suicide prevention.

The SISA program is offering presentations on Positive Youth Development as a major strategy to promote healthy lifestyles among youths that could help in the prevention of at-risk behaviors - including suicidal behavior- to school, human service and health professionals in the eight health regions.

The Naranjito Youth Program has begun the implementation phase of the community-based pilot Positive Youth Development in Naranjito, a rural municipality.

The PR Commission for Suicide Prevention continues distributing educational materials on the signs and symptoms associated with suicidal ideation and ways to prevent teen suicide. It also continues providing orientations to the public and professionals of diverse fields on adolescent suicidal behavior -how to manage suicidal attempts and how to identify suicidal signs.

#### **c. Plan for the Coming Year**

PRMCH will implement the following plan to address the prevention of teen suicidal behavior and the promotion of healthy lifestyles among youth:

- 1) Presentations in school and community settings on topics related to adolescent mental health in the eight health regions.
- 2) Promote the utilization of the ASSMCA Mental Health Support Line PAS toll free hotline among youth, parents and professionals.
- 3) Assist the PR Commission for Suicide Prevention in the distribution of the "To Save Lives" kit and other informational packets on adolescent suicide prevention throughout the eight health regions.
- 4) The Comprehensive Adolescent Health Services (SISA) will conduct presentations and trainings to disseminate information on and promote the adoption of the Positive Youth Development as an important strategy for the prevention of high-risk behaviors and the promotion of the health -including mental health - of the adolescent population.
- 5) The Comprehensive Adolescent Health Services (SISA) will be pilot testing and evaluating six training Positive Youth Development modules targeted at youth to become PYD promoters. Upon evaluation, the modules will be revised, finalized and trainings will be offered to adolescents.
- 6) The Comprehensive Adolescent Health Services (SISA) will implement the "Abracemos La Vida" (Let's Embrace Life) module in the Youth Health Promoters project.

The PR Commission for Suicide Prevention has planned the following activities for the coming year:

- 1) Train around 15,000 public officials from the health and human behavior fields in suicide prevention.
- 2) Mass media campaign to create public awareness of suicide signals and ways to prevent it.
- 3) Celebrate the 13th National Suicide Prevention Day on August 12, 2009.
- 4) Celebrate the International Suicide Prevention Day on September 10, 2009.
- 5) Celebrate the Suicide Prevention Awareness Day on December 5, 2009.
- 6) Distribute the "To Save Lives" kit and other informational packets on adolescent suicide prevention throughout the eight health regions.
- 7) Establish a suicide surveillance system in Puerto Rico.

**Performance Measure 17:** *Percent of very low birth weight infants delivered at facilities for high-risk deliveries and neonates.*

Tracking Performance Measures

[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

<b>Annual Objective and Performance Data</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
Annual Performance Objective	79	55	45	47	49
Annual Indicator	45.5	42.3	44.6	43.4	39.1
Numerator	340	311	325	283	268

Denominator	747	736	729	652	686
Data Source					Birth Certificate OITA
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Final	Provisional
	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
Annual Performance Objective	51	53	55	57	59

#### **Notes - 2008**

Updated data for 2007. Data for 2008 provided by the Office of Informatics and Technology Advances (OITA) of the Department of Health. A panel of experts in neonatology of the Pediatric University Hospital provided a list of Level II and III NICUS available in the Island. A Revisor Revisor Committee was established to provide a more precise data of the levels of perinatal care in PR.

#### **Notes - 2007**

Updated data for 2007. For source of information refer to 2006 notes.

#### **Notes - 2006**

A panel of experts in neonatology of the Pediatric University Hospital provided a list of Level II and Level III NICUS available in the Island. A Revisor Committee was established to provide a more precise data of the levels of perinatal care in PR.

Data for 2005 provided by the Office of Informatics and Technology Advances (OIAT) of the Department of Health. Data of 2006 is preliminary.

#### **a. Last Year's Accomplishments**

The percentage of VLBW infants delivered in facilities prepared to manage high risk deliveries and neonates was 43.4% in 2007. Preliminary data for 2008 Vital Statistics revealed that 40.2% of VLBW deliveries occurred in the appropriate facility. One possible explanation for this decrease is the lack of a formal classification of these perinatal facilities and the constant change in the services they provide to newborns. Many low birth weight births may be occurring in facilities that are prepared for high-risk deliveries but they are not identified as such.

However, because of the need to be able to identify accurately where VLBW deliveries are occurring in Puerto Rico, the MCH Program established a Perinatal Care Guidelines Review Committee in 2007. Their goal was to classify hospitals that provide perinatal services in PR. During 2008, perinatal nurses of the MCH Program interviewed medical staff from 34 of the 39 hospitals that were eligible to participate in the study (response rate of 87%). A preliminary analysis reports that 27.3% of the hospitals were classified as level III (Subspecialized), whereas 30.3% were classified as level II (Specialized) and 42.4% were classified as level I (Basic). With these classification data we can say that during 2007 approximately 53.8% of VLBW deliveries occurred in subspecialized facilities.

HVNs routinely assess their clients for risks associated with premature delivery. They provide appropriate education/counseling regarding the signs and symptoms associated with premature labor and provide them information regarding the closest birthing facility with Level III perinatal services. During last year, HVNs visited 6,510 families and identified their OB needs. During these visits, 11,222 individual cases in the community were identified as possible candidates to

participate in the program or were referred to different health programs.

The "Comenzando Bien" prenatal educational curriculum, developed by March of Dimes, is offered to pregnant women throughout the island by specially trained and certified facilitators. It includes information on the signs and symptoms of a premature delivery. During FY 2007-2008, 76 sessions of the "Comenzando Bien" program reached 1,215 participants, including pregnant women and their significant others.

During 2008, the MCH Program continue collaborating with the Puerto Rico Chapter of March Dimes Prematurity Taskforce (PRPT). Data from 1990 to 2004 was analyzed with the objective of identifying major prematurity risk factors that could explain our very high prematurity rate. Results were presented in the Surgeon General's Conference on the Prevention of Preterm Birth in Bethesda, Maryland and in the 2008 Pediatric Societies Annual Meeting in Hawaii.

The MCH Program developed the Prenatal Care Card (PNC Card) to ensure that the pregnant women have with them at all times information regarding their prenatal care and will be able to provide this information to ER providers during an obstetric emergency. The PNC Card was submitted to the Health Insurance Administration of Puerto Rico (ASES) for their evaluation. ASES will distribute the PNC Card to all the insurance companies that offer services to GIP participants with the objective to standardize this information among this population.

The MCH Community Health Workers distributed educational material and offered 188 group activities on the subject of signs and symptoms of premature labor to 1,955 participants across the Island during 2008. Likewise, orientations regarding where to seek emergency assistance in case premature labor ensues were offered in 11 group activities with a total of 121 participants.

**Table 4a, National Performance Measures Summary Sheet**

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Educate pregnant women on the risk of preterm delivery and where to go in case of an emergency.			X	
2. Disseminate educational materials explaining signs and symptoms of PTB.			X	
3. Collaborate with the PR MOD Prematurity Taskforce.				X
4. Classify hospital facilities by levels of perinatal care, according to the adapted Perinatal Care Guidelines (5th edition).				X
5. Promote the use of a prenatal card with pertinent information to be carried at all times by pregnant women.				X
6.				
7.				
8.				
9.				
10.				

**b. Current Activities**

Preliminary results of the study that expects to classify the hospitals according to their perinatal services were discussed with members of the Perinatal Care Guidelines Review Committee. During this meeting certain adjustments were recommended on how the hospitals should be properly classified. Therefore, the analysis used to classify the hospitals is being adjusted according to these recommendations. We expect to complete the analysis this summer.

As part of the PR March of Dimes Chapter PRPT, the MCH Program will collaborate in this year objective of decreasing late preterm births. A massive TV, radio, newspaper and billboards



campaign will be design to emphasize the importance of the last weeks of gestation for the maturity of a fetus. We expect to launch this campaign in November 2009 during the Prematurity Awareness and Prevention Day.

The MCH Program began to design a new Prenatal Course similar to the one offered by the March of Dimes "Comenzando Bien" prenatal educational curriculum. This Prenatal Course will focus on the special needs of the participants. It is composed of 4 sections that cover prenatal care, healthy eating habits, physical activity, orientation of labor and delivery, breastfeeding, newborn care, family planning, among others.

HVNs and CHWs continue to educate pregnant women on the signs and symptoms of preterm delivery and providing them with information regarding the Level III facilities closest to them.

### **c. Plan for the Coming Year**

The hospital facilities in Puerto Rico will be classified as basic care (Level I), specialty care (Level II), subspecialty care (Level III), and supratertiary care, according to the adapted Guidelines for Perinatal Care. Once hospitals are classified into these categories, a descriptive analysis will be repeated in order to identify newborns outcome depending on their place of birth. The findings of this study will be shared with perinatal providers and executive directors of birthing facilities across the Island. Once the study concludes, we expect birthing hospitals will be able to coordinate among themselves and establish a regional referral network based on their assigned level of care. This will allow them to provide services in the appropriate facilities to pregnant women, based on their level of risk for a poor pregnancy outcome.

The MCH Division will continue to participate in the Puerto Rico Prematurity Taskforce (PRPT) organized by the PR Chapter of March of Dimes with the objective of identifying specific causes that might explain the increase in premature births.

The MCH staff and HVNs will continue to educate pregnant women to recognize the early signs and symptoms of premature delivery. In addition, we will stress the importance of knowing where the closest Level III facilities are located so they will know where to go for an obstetrical evaluation in case premature labor signs and symptoms appear. In addition, educational materials and information concerning signs and symptoms premature labor will be disseminated to pregnant women. MOD will continue its aggressive prematurity awareness campaign in the media.

The new Prenatal Courses will continue on a regular basis. The signs and symptoms of a premature labor will be addressed during the sessions.

### **Performance Measure 18:** *Percent of infants born to pregnant women receiving prenatal care beginning in the first trimester.*

#### **Tracking Performance Measures**

[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

<b>Annual Objective and Performance Data</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
Annual Performance Objective	85	86	87	88	89
Annual Indicator	83.2	71.6	82.0	81.9	82.7
Numerator	42594	36285	39199	37270	36675
Denominator	51223	50687	47806	45486	44339
Data Source					Birth Certificate

					OITA
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Provisional	Provisional
	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
Annual Performance Objective	90	91	92	93	94

#### **Notes - 2008**

Updated data for 2007. Data for 2008 provided by the Office of Informatics and Technology Advances (OITA) of the Department of Health.

In 2008, 2.7% (936) of the women who delivered did not answer the question and were regarded as missing values for this field in the birth certificate. The reported number reflects the proportion of women who provided an answer for the question.

#### **Notes - 2007**

Updated data for 2007. For source of information refer to 2006 notes.

#### **Notes - 2006**

Numerator and Denominator: Preliminary data provided by the Office on Informatics and Technology Advances (OITA) of the Department of Health.

Beginning in 2005, changes were introduced to the birth certificate. The earlier version of the birth certificate asked the woman the month of pregnancy when she started prenatal care, while the new version asks her the date when she began prenatal care.

In 2006, 11.2% (3470) of the women who delivered did not answer the question and were regarded as missing values for this field in the birth certificate. The reported number reflects the proportion of women who provided an answer for the question.

#### **a. Last Year's Accomplishments**

Routine prenatal care (PNC) provides the opportunity of detecting potential problems, preventing them if possible, and promoting the health and well being of the pregnant woman and her significant ones. In particular, early PNC is one of the most cost-effective policies used in public health. Due to this, the MCH Division continually promotes this health approach at all levels in the island.

Vital Statistics (VS) preliminary data for 2007 in PR revealed that 97% of the mothers with a live birth received PNC. Of these, 65.8% were under the GIP insurance, 33.1% had private insurance, and 0.2% had no health cover. Nevertheless, only 79.8% of live births happened to women who entered PNC in the 1st trimester, despite having a health plan. These results compare to those for 2006: any PNC (99.8%); GIP (65.1%); private plan (33.6%); no health plan (1.3%).

Age-related disparities in early PNC rates were observed when the MCH Division analyzed the 2006 VS data. Women 20 years or older had higher rates of early PNC initiation (67.7%) than adolescents (10-19 years: 12.7%). For 2007 the results were similar (> 20 yrs: 67.3%; 10-19 yrs: 12.5%).

The 2006 PRAMS-like study, ESMIPR (Spanish acronym), disclosed that 92% of postpartum (pp) women who answered the questionnaire began PNC in the 1st trimester, 7.6% during the 2nd or

3rd trimester, while 0.4% had no PNC. Results for 2008 ESMIPR were: 89.7% (first trimester); 8.05% (2nd or 3rd trimester); and 0.4% (no PNC).

The MCH Division performed a study in 2005 to identify factors that may influence women's late entry into or lack of PNC. The study used a self-administered survey to women in pp wards and Demographic Registry offices with no evidence of PNC or who began it after 13 weeks of pregnancy. Results showed that 96.6% of respondents began their PNC after their 1st trimester, and 3.4% had no PNC. Also, 58% were in the 20-35 age range; 37.4% were adolescents; 64% were married or living with a partner; 82.6% had high school education or less; and 84.9% were GIP participants. The main obstacles identified were personal or health care system-related: being unaware of pregnancy (64.7%); no health plan at conception (21.1%); and fear of notifying parents they were pregnant (15.8%). Also, 41.5% reported waiting more than a week for the appointment after soliciting the service.

Analysis of all available data and information obtained from CHW and HVN revealed that a contributing factor for the low rate of early PNC among adolescents could be the requirement of documenting a positive serology test for pregnancy to be eligible for the GIP and enter PNC services. A protocol was elaborated to help adolescents suspecting a pregnancy get the blood test and obtain the GIP card if result was positive. Assistance would be provided for initiating PNC in the 1st trimester. Several meetings were coordinated with key partners, including ASES and the HIC, to apply the protocol.

Unfortunately, the New Civil Code has risen to 16 the age for consenting to have sex. All pregnant teens under this age are to be reported to the authorities. This represents a barrier for early entry to PNC since some adolescents decline our assistance to avoid being referred.

Preconception health is a key factor in the pregnancy outcomes of women of childbearing age. For this reason, the MCH Division set up a Committee for Promotion of Preconception Health with important collaborators, among them, HIC, WIC, Diabetes Program, BD Surveillance System, Academia and Healthy Start Program. A pilot project aimed at pp women with diabetes was proposed as a strategy to elicit their awareness of the importance of controlling their diabetic condition during the preconception period to improve the results of future pregnancies. The project, at present under development, will consist of several educational interventions on diabetes control, nutrition, physical activity and women's health.

Efforts continued to achieve that at least 86% of pregnant women in PR enter PNC during their 1st trimester, our HP 2010 goal. CHW island wide collaborated in identifying and referring pregnant women without PNC to obstetrical care ASAP. Likewise, they offered 185 group orientations on the subject of early entry to PNC to 2,819 persons in the community.

Meanwhile, during CY 2007, HVN provided individual orientation regarding early signs and symptoms of pregnancy and the importance of early PNC to 5,217 interconceptional participants of the HV Program.

**Table 4a, National Performance Measures Summary Sheet**

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Continue to increase knowledge at public level on the importance of early and regular prenatal care.			X	
2. Assure that all pregnant women with incomes 200% below the State Poverty Level benefit from health insurance coverage that includes free early and comprehensive prenatal care.		X		
3. Continue providing activities at community level to detect pregnant women who lack prenatal care and help them in the		X		

enrolling process into prenatal care.				
4. Promote preconception care and early PNC admission when a pregnancy ensues among participating families during HVN interventions and at the community setting.			X	
5. Disseminate results obtained from studies carried out by MCH staff, such as 2008 ESMIPR, among key collaborators to enhance their awareness of and commitment with the importance of promoting early prenatal care.				X
6. Continue promoting compliance among health providers and other key partners with the public policy that states pregnant women must be admitted into PNC as soon as they solicit it.				X
7. Emphasize the importance of initiating PNC early in case of a new pregnancy to postpartum women with diabetes participating in the preconception health pilot project.			X	
8. Summon the Committee for the Promotion of Preconception Health at least 4 times throughout the year.				X
9.				
10.				

#### **b. Current Activities**

We have continued our efforts to promote early entry into PNC. Identifying pregnant women with no PNC and assisting them in the enrolling process into obstetrics and HVP care is our main concern.

Our CHW and HVN have continued offering outreach activities on the importance of seeking PNC early in pregnancy. Also, HVN have provided individual orientations on the early signs and symptoms of pregnancy and the importance of early PNC to interconceptional women at home visiting interventions.

The Committee for the Promotion of Preconception Health met regularly to develop the modules for the pilot project aimed at women of reproductive age with diabetes, particularly interconceptional women. Two WIC Program clinics in the Western area were chosen as the setting to initiate the project.

Two training activities on the Heart Truth curriculum, with funds provided by the Office on Women's Health, were carried out with the participation of 88 PCP's and RN. The participants were encouraged to educate women about heart disease, assess their risk, the importance of early PNC, and to motivate them to take preventive actions.

The State Systems Development Initiative (SSDI) trained data abstractors to collect hospital birth record information for the MCH Division study to evaluate the effect of the 2005 birth certificate review on some VS parameters, including PNC. The study concluded and analysis is in progress. The results will help us to assess if the changes in early PNC rates are real.

#### **c. Plan for the Coming Year**

To improve the rates of early PNC admission among pregnant adolescents, we will continue focusing our attention in identifying and helping them in the process of enrolling into PNC services as soon as they know their status. To achieve this, emphasis will be made on the importance of implementing the protocol mentioned previously.

Communities across the island will continue benefiting from educational activities by the MCH staff to increase awareness of the general population regarding the importance of early PNC for pregnant women. Information will highlight the identification of early signs and symptoms of

pregnancy and the need to seek PNC as soon as a woman suspects she is pregnant, to abide by the results of the survey carried out by the MCH Division in 2005 that indicated the main reason for not seeking early PNC was being unaware of the pregnancy. Likewise, we will target those pregnant women who have not requested their first PN visit to raise their awareness of the importance of initiating PNC as soon as possible.

The preconception health pilot project will start during the fall of 2009 in the two WIC clinics already selected. The project will provide 4 educational interventions on the subjects already mentioned. Special emphasis will be made on maintaining adequate health parameters during the preconception period and to initiate PNC immediately if a pregnancy occurs. A full evaluation will follow after its conclusion to make modifications if needed and to decide if we expand it to other communities in the island.

The analysis of the study to evaluate the impact of the 2005 birth certificate review will provide us insight regarding the adequacy of the information gathered through this instrument. We will be able to give feedback to individuals dealing with this instrument about ways of improving their input of information. Also, it will provide basis for further studies to evaluate compliance with the current public policy regarding early PNC in Puerto Rico.

Prenatal health care providers and significant stakeholders are responsible of educating their clients on the early signs and symptoms of pregnancy and promoting their early entry into PNC. To increase their awareness and commitment on these issues, the MCH staff will disseminate important information to them, such as the 2008 ESMIPR and the study about late admission into PNC.

Likewise, the MCH Division will continue to promote compliance among PR Health Insurance Administration, HIC, and prenatal care providers with the existing public policy that requires the admission of all pregnant women into PNC as soon as they request the service.

We will also establish a Committee with key partners to review the current DoH guidelines for prenatal care to update its content.

## D. State Performance Measures

**State Performance Measure 1:** *The number of HIV positive pregnant women treated with AZT.*

### Tracking Performance Measures

[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

<b>Annual Objective and Performance Data</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
Annual Performance Objective	100	100	100	100	100
Annual Indicator	82.5	93.2	94.0	98.7	100.0
Numerator	66	69	78	76	56
Denominator	80	74	83	77	56
Data Source					Pediatric HIV AIDS program
Is the Data Provisional or Final?				Final	Provisional
	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
Annual Performance Objective	100	100	100	100	100

### Notes - 2008

For source of information refer to 2006 notes.

**Notes - 2007**

Updated data for 2007. For source of information refer to 2006 notes.

**Notes - 2006**

Data provided by the Pediatric HIV/AIDS program for CY 2006.

**a. Last Year's Accomplishments**

The PR Department of Health has consistently considered a priority the rendering of adequate services to HIV positive pregnant women in the Island. For this reason, a public policy was enacted in 1994 to offer HIV positive pregnant women in the Island the opportunity of treatment with AZT on a voluntary basis to prevent perinatal HIV transmission. Perinatal HIV Treatment and Prevention Guidelines were developed and delivered to health care providers across the Island through the GIP Health Care Insurance Companies offering their services at the time. HCIC required all health providers under their contract to comply with the guidelines. New therapy options were included in these guidelines besides AZT to ensure adequate treatment.

Later, a pilot project was implemented in the Carolina Hospital in the North area of PR to provide rapid HIV testing for women in labor with unknown HIV status and to treat those with positive HIV results. A reduction in the vertical transmission of perinatal HIV was observed as a result of this approach. Following this, the Secretary of Health signed a public policy in February 2008 that requires that all health institutions in PR provide rapid HIV testing in labor rooms for women without evidence of HIV status in the first and third trimester of pregnancy, to treat those with HIV positive results, and to provide rapid HIV testing to those neonates whose mothers could not be screened. The MCH Program collaborated in the process that led to its approval.

Throughout CY 2007, only one of 54 pregnant women with unknown HIV status who were tested in the Carolina Hospital was found HIV positive and received treatment accordingly. Until now, this was the only health institution offering the rapid HIV testing. At present, the Perinatal HIV/AIDS Prevention Program of the DoH (PHAPP) is assisting major birthing hospitals in the Island to establish the rapid HIV testing public policy mentioned above in their labor rooms.

In 2007, the PR Health Insurance Administration (ASES, Spanish acronym) informed that 26,702 pregnant women participants of the GIP were screened for HIV. Of these, 77 had positive results. A total of 76 (99%) of them received antiretroviral treatment for HIV. However, only 40 completed all three phases of treatment. The others received partial treatment, except one woman whose pregnancy and treatment status was unknown. Of the 77 HIV-positive women, 52 delivered a live infant. One (1) of these infants remained HIV positive.

Increasing awareness amid pregnant women of the need to know their HIV status and to receive prompt and adequate treatment if the result is positive is essential to reduce perinatal HIV transmission. The MCH Division and the PHAPP are both engaged in this task. During FY 2007-2008, MCH CHWs reached 529 persons across the Island in 28 educational group events on the subject. In CY 2007, HVN provided one-on-one orientation on HIV/AIDS prevention, including perinatal transmission prevention, to all 6,390 prenatal and interconceptional participants of the program. During CY 2007, the Perinatal HIV/AIDS Prevention Program provided training sessions aimed at health care professionals across the Island, among them those giving services at health institutions, on the importance of preventing HIV/AIDS perinatal transmission, the use of rapid HIV testing, and the adequate follow up and treatment of those pregnant women with positive HIV results. Personnel from agencies and associations related to health care services received educational material on the subject. Likewise, the seven Regional Immunology Clinics have provided their services and knowledge in the prevention and treatment efforts to reduce vertical HIV transmission.

**Table 4b, State Performance Measures Summary Sheet**

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Continue providing educational activities and reading material to HVP participants, particularly pregnant women, on the importance of being screened to know their HIV status and to receive adequate treatment if test result is positive.			X	
2. Continue offering pre-counseling and screening for HIV to pregnant women and treatment to those with HIV positive results on a voluntary basis.	X			
3. Share with health care providers the information regarding the recently established public policy that obliges all birthing institutions do the rapid HIV test to all women in their labor rooms whose HIV status is unknown.				X
4. Disseminate results of data related to perinatal HIV screening and treatment with key health providers.				X
5. Distribute educational material on the topic of perinatal HIV transmission prevention at the community level.			X	
6. Continue collaborating with the Perinatal HIV/AIDS Prevention Program in their efforts to monitor compliance with perinatal health care guidelines that require health providers order HIV testing during PNC for HIV negative women they serve.				X
7. Continue promoting the use of the patient prenatal information card as a tool to assure that all pregnant women are screened in conformity with the current perinatal care guidelines.			X	
8.				
9.				
10.				

**b. Current Activities**

The MCH staff and PHAPP continue educating the population Island wide about perinatal HIV/AIDS prevention. CHWs have disseminated related information at community level. Also, in 2008, HVN provided individual orientations and group activities on the subject to 6,553 prenatal and interconceptional women participants of the program. The PHAPP held 8 educational events on Perinatal HIV/AIDS prevention with the participation of 99 persons, among providers from health institutions and at community level. Training sessions on the subject took place at 3 hospitals and at a local hotel reaching 327 health providers.

Special emphasis has been made on complying with the recently established public policy regarding rapid HIV testing. The PHAPP has continued assisting major birthing hospitals in PR to carry out the rapid HIV testing policy. During CY 2008, a total of 1,398 women were screened with the rapid HIV test at hospital delivery rooms across the Island. Of these, 2 were HIV positive and were referred for treatment.

So far during this period, 81 pregnant women have been found HIV positive, either by rapid HIV test at delivery rooms or through recommended prenatal HIV screening as reported by PRHIA (preliminary results). Only one did not receive antiretroviral treatment (cause unknown). Of these, 49 completed treatment as recommended, which include AZT. To date, 58 cases have delivered, and 19 are still pregnant. Three had an abortion. No infant has been reported HIV positive.

**c. Plan for the Coming Year**

Identifying HIV positive pregnant women and treating them adequately with antiretrovirals, which include AZT, is vital to reduce the perinatal transmission of HIV/AIDS. To contribute in achieving

this task, the MCH Division will continue to highlight the importance of perinatal HIV prevention when providing educational activities at the community level and at home visits to the HVP participants, including the distribution of educational material on the subject. Women participants of the HVP who are found to have positive HIV results will be referred for case management and care services at Immunology Clinics across the Island.

The Perinatal HIV/AIDS Prevention Program and the MCH Division will join efforts to provide educational activities as part of the prenatal curriculum being offered in several Island municipalities. They will emphasize the importance of preventing perinatal HIV/AIDS transmission and will help pregnant participants with no evidence of an HIV test to get the rapid HIV analysis on a voluntary basis.

The MCH Division will also collaborate in raising awareness among health care providers and institutions of their responsibility to comply with the established rapid HIV test public policy. Important partners in this endeavor, among them the PR College of Physicians, the PR Chapters of ACOG and AAP, and HIC, will be encouraged to help in disseminating the information pertinent to the public policy and to current perinatal guidelines of the DoH, particularly by educational events to earn CME credits. Statistical data related to perinatal HIV/AIDS transmission in the Island will be available for those interested.

The Perinatal HIV/AIDS Prevention Program, together with the MCH Division and the collaboration of the administrative section of the PR Health Care Reform, will continue monitoring if health care providers are acting in accordance with the perinatal health care guidelines about HIV screening. This way we will be able to identify barriers and outline strategies to increase the number of pregnant women screened for HIV as well as provide adequate treatment and follow up to those with HIV positive results. We will also continue promoting that pregnant women carry a prenatal card that includes essential personal prenatal care information, including HIV test results.

**State Performance Measure 2:** *Establish a Home Visiting program in at least 90% of the Island by the year 2,010.*

**Tracking Performance Measures**

[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

<b>Annual Objective and Performance Data</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
Annual Performance Objective	95	95	95	95	95
Annual Indicator	94.9	94.9	93.6	89.7	93.6
Numerator	74	74	73	70	73
Denominator	78	78	78	78	78
Data Source					Home Visiting Program
Is the Data Provisional or Final?				Final	Provisional
	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
Annual Performance Objective	95	95	95	95	95

**Notes - 2008**

For source of information refer to 2006 notes.

**Notes - 2007**

Updated data for 2007. For source of information refer to 2006 notes.

**Notes - 2006**



Reported data as of December 31, 2006, MCH Division of the PR Department of Health.

This measure will be changed next year to a more specific one.

#### **a. Last Year's Accomplishments**

The core service program of the Puerto Rico Title V program is the Home Visiting Program. Its target population consists of pregnant women, interconceptional participants (up to 24 months after birth) and children up to age 2 with complex health and social problems. By the end of 2008, 94 Home Visiting Nurses (HVN) were providing services in 73 municipalities (93.6% coverage). The Department of the Family's Administration for Children and Families (ADFAN) established the "Nidos Seguros" HVP to complement the services provided by Title V. They have 8 HVNs who cover a total of 20 municipalities (these are included in the numbers above). In addition, 57 Community Health Workers (CHWs) provide outreach and education services in 55 municipalities (80.7%).

We continue to have a decrease in the numbers of HVNs due to retirement, extended sick leave, and transfers to other positions or resignations. We will consider recruiting personnel to fill existing vacancies as budget, administrative considerations and other factors allow.

Through the HVP interventions, emphasis is given to increasing the use of preventive services, early admission to prenatal care, regular pediatric and women's health visits to primary providers, and adequate immunizations; screening for behavioral risk factors and maternal depression; managing women who are at risk through educational interventions or referrals to treatment services available in the community; and promoting an interconceptional period of at least 24 months after birth.

In 2008, 6,510 families received home visiting services. CHWs continued carrying out outreach activities to identify pregnant women and children not connected to the health care system and refer them to the HVP or to services available in the community, according to their needs and the capacity of the local HVN to admit new cases. They identified 8,566 pregnant women and children in the community who were not connected with the existing system of care who were given the necessary referrals to prenatal care, WIC and other services. Some were admitted to the HVP, according to their need, risk factors and the caseload of the HVN. If not admitted, the CHW's intervention ensured that the woman or child would receive needed medical, social and other support services. The CHWs maintain an extensive directory of community resources, which they share with the HVNs to facilitate the referral and care coordination efforts.

In addition, in FY 2007-08 the HVNs and CHWs reached 110,916 persons in the community through 8,236 group orientations on topics related to maternal and child health.

HVN and CHW assisted HVP participants in organizing Participants' Committees (PCs) at the local (municipal) level. These groups are composed of HVP participants, their partners or other support persons and community representatives who are interested in the health and well being of the maternal and child population. The purpose of these committees is to empower participants to solve their common problems and needs with the collaboration of public and private agencies and organizations. Each PC met regularly to establish a work plan to look for solutions to the situations they identified as priorities.

**Table 4b, State Performance Measures Summary Sheet**

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Continue offering home visiting services for at-risk pregnant and parenting women.		X		
2. Offer continuing education activities for HVNs and CHWs to				X

enhance their professional capacity.				
3. Fully implement the case assignment system for HVNs to reflect the risk level of participants.				X
4. Train HVNs to screen for developmental delays in infants and toddlers.				X
5. Continue HVP data collection, analysis and evaluation activities.				X
6. Reinforce HVP Participants' Committees.				X
7. Collaborate with the Department of the Family in the continued implementation of a Home Visiting Program.				X
8.				
9.				
10.				

#### **b. Current Activities**

The HVNs and CHWs continue to provide services as previously described. As of April 2009 we have 94 HVNs in 73 municipalities (93.6%); this number includes both Title V and ADFAN nurses.

HVNs and CHWs received in-service training regarding: Promoting mental health in the family; Cultural competence; Neurodevelopmental Screening (Ages and Stages Questionnaire); Infant and child development; Dental health; Care of the premature infant at home. Some HVNs received training in grief and bereavement to equip them to conduct the FIMR maternal interviews.

In November and December 2008, the FIMR project sponsored three sessions of a lecture for hospital nurses and social workers entitled "Managing perinatal and infant loss in the hospital: supporting the bereaved family". The speaker was a psychologist who specializes in grief and bereavement. The initial meetings of the Case Review Committee took place in the first and second quarters of 2009.

The Rotary Club of Puerto Rico adopted Infant Mortality as a focus area for its community activities in 2008-09. Two representatives joined the PR Healthy Start Consortium in 2007. The Rotary Club has sponsored educational activities directed at our participants and the community. The most significant contribution has been the use of their meeting facilities free of charge, which substantially lowered the cost of providing continuing education to our staff.

#### **c. Plan for the Coming Year**

Depending on the availability of qualified candidates and funding level, vacant HVP positions may be filled. Priority will be given to those municipalities with no HVN. The collaboration with ADFAN will continue, ensuring a wider availability of support services for the population that Title V cannot serve.

The HVP will continue to provide services as described. Participants will be stratified according to risk level (Low, Moderate, Severe) depending on how many and what type of risk factors they present. The caseload of each HVN will range from 50-70 families, depending on the risk level of each. Community Health Workers will continue to carry out outreach activities to identify pregnant women and children who are not connected to the health care system, as described previously. In addition, they will take part in the HVP as described previously.

The collaboration between Title V and the PR Healthy Start Project (PRHSP) continues to be an asset. We will maintain our efforts to identify factors associated with the higher IM in the South/Southwest areas of the Island and continue to implement strategies to improve MCH indicators in this area. The current Healthy Start Project period ends on January 31, 2010. A

competitive application for the next 5-year cycle will be submitted in the fourth quarter of 2009. We will undertake a thorough review of IM trends and other MCH indicators to determine the scope and direction of the PRHSP for the upcoming project period. The Healthy Start grant monies are used to support the efforts of the Home Visiting Program, particularly in the areas of staff training, educational materials, Consortium development and data collection, analysis and evaluation.

Ongoing assessment of the staff's educational needs will allow us to continue offering in-service training that is responsive to the needs and interests of the staff. This assures a high quality of services offered to our population. HVNs and CHWs will receive continuing education on timely MCH topics.

In addition, our HVNs and CHWs will continue to support the development of the PCs. Each PC will meet on average 6-10 times per year and establish a work plan to look for solutions to the situations they identify as group priorities. The meetings also feature educational activities on various MCH topics. Some PCs may sponsor or participate in community level health fairs and immunization clinics held by the PRDoH Immunization Program.

### **State Performance Measure 3: *Prevalence of tobacco use among pregnant women***

#### **Tracking Performance Measures**

[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

<b>Annual Objective and Performance Data</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
Annual Performance Objective	2	1.5	1.5	1.5	1.5
Annual Indicator	3.6	3.6	2.7	2.0	2.0
Numerator	36	36	52	38	38
Denominator	1004	1004	1904	1876	1876
Data Source					ESMIPR
Is the Data Provisional or Final?				Final	Final
	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
Annual Performance Objective	1.5	1.5	1.5	1.5	1.5

#### **Notes - 2008**

Updated data for 2007. Data collected through the ESMIPR Survey conducted in 2008, MCH Division of the Puerto Rico Department of Health.

#### **Notes - 2007**

Data collected through the PRAMS like survey conducted in 2008, MCH Division of the Puerto Rico Department of Health.

#### **Notes - 2006**

Data collected through the PRAMS like survey conducted in 2006, MCH Division of the Puerto Rico Department of Health. Data reported last year, corresponds to ESMIPR 2004 Survey.

#### **a. Last Year's Accomplishments**

The "PR Maternal and Child Health Study" (ESMIPR, Spanish acronym) is a PRAMS-like surveillance study carried out every two years by the MCH Division. In the 2008 survey, 1,876 women were interviewed in the immediate post partum period. Since the 2002 survey, the prevalence of smoking at any time during pregnancy has followed a downward trend (statistically significant), as follows: 2002 (4.1%); 2004 (3.6%); 2006 (2.7%); 2008 (2.0%).

Among pregnant Home Visiting Program (HVP) participants screened in 2008, 49 reported smoking during pregnancy. Of these, 46 (93.8%) stopped smoking or significantly reduced their use of tobacco, and 3 (6.2%) participants continued smoking at the same rate.

For 2008, preliminary birth certificate data show 0.03% of new mothers report using tobacco in the 3 months before pregnancy and 0.02% do so in the first, second and third trimesters. In contrast, the 2007 BRFSS revealed that 7.9% of all women smoked every day or some days (pregnancy status was not ascertained).

The Home Visiting Nurses (HVN) continue implementing the smoking cessation program that was designed in 2001 under the sponsorship of AMCHP's Tobacco-Free Futures Mini-Grant. It is based on the USPHS Guidelines for Smoking Cessation and uses DiClemente and Prochaska's Transtheoretical Model as the basis for designing the most appropriate intervention. The "Perfil de la Participante" (Participant's Profile) is the instrument designed to collect information regarding smoking status, to determine addiction severity, susceptibility to change and level of motivation and support. The information gleaned from this instrument allows the HVN to tailor the educational content and the motivational intervention. The self-help diary "Mi Gran Decisión" is used as a complement to the HVN's intervention and is meant to guide the participant through a seven-day quitting process.

In addition to this program, HVNs stress the importance of avoiding environmental tobacco smoke (ETS) for women who, although not smokers themselves, live or spend time with smokers. Orientation and education are offered to these women on an individual basis, and educational materials reinforcing the information are distributed to them.

Educational materials regarding both smoking and exposure to ETS are distributed in health fairs and other community education activities. In FY 2007-08, a total of 300 educational activities on ETS and smoking prevention were carried out, reaching 4,283 participants.

The "Comenzando Bien" prenatal education curriculum, developed by March of Dimes, was offered to pregnant women throughout the island by specially trained and certified facilitators. One of the topics covered in this program is use of tobacco in pregnancy. In 2008, 16 sessions of the "Comenzando Bien" program reached 286 participants, including pregnant women and their partners or other support person.

In December 2004, the Department of Health established an island-wide, toll-free smoking quit line. In 2007, the quit line assisted 1,167 smokers (66.6% were women and 69.3% were 16-51 years old).

On March 2, 2007, changes to Law #40, the Law to Regulate Smoking in Public and Private Places, took effect. This comprehensive law prohibits smoking in all workplaces, businesses, private and public spaces. Law #21, signed 2/29/2008, requires all health insurance companies to cover smoking cessation methods and products for their enrollees.

**Table 4b, State Performance Measures Summary Sheet**

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Share information of the ESMIPR survey with concerned individuals.				X
2. Screen HVP participants for tobacco use and provide management according to the level of risk.	X			
3. Update providers' knowledge regarding screening and management of tobacco use during pregnancy.				X
4. Include the topics of alcohol, tobacco and illicit drug use in patient orientations.			X	
5. Disseminate educational materials on adverse effects of high risk behaviors during pregnancy.			X	

6. Increase public awareness of poor birth outcomes associated with risky behaviors.			X	
7. Promote the use of the Quit line among WCBA.			X	
8.				
9.				
10.				

#### **b. Current Activities**

HVNs continue to implement the smoking cessation program. Educational materials are distributed at the community level. The effects of smoking on the fetus are covered in educational activities for pregnant women. As of 2009, we no longer use the March of Dimes "Comenzando Bien" prenatal curriculum; instead, we have developed a local version that is more pertinent to our participants in both content and format. The annual "No Smoking Day" march in Arecibo had over 350 participants, including general public, pregnant women and children.

The Administration for Children and Families (ADFAN) of the PR Department of the Family continues to implement its Home Visiting Program. Their HVNs implement the tobacco use screen and the Smoking Cessation guide, as trained by the Healthy Start staff.

According to the 2008 ESMIPR, 2.0% (38) of 1,876 respondents smoked at some point during pregnancy and 1.1% (20) continued to do so in the last trimester. These figures are slightly lower than reported in 2006.

The interagency Tobacco Coalition continues smoking cessation promotion activities. In 2008, the quit line assisted 1,137 smokers; 54% were women, and 317 were women ages 44 and under. Only 8 women (0.7% of the total) reported being pregnant at the time of the call. The quit rate for the help line is approximately 35% over the years it has been in existence.

#### **c. Plan for the Coming Year**

HVNs will continue to screen all Home Visiting Program participants for tobacco use and provide management according to the level of risk. HVNs will continue to pay special attention to women who quit smoking during pregnancy to avoid a postpartum relapse.

CHWs will also continue to include the topics of alcohol, tobacco and drug use in educational activities and individual orientations during their interventions in the community. These topics will be covered in depth during the prenatal and parenting courses and other educational activities.

The SSDI is undertaking an evaluation of the impact of the implementation of the revised 2005 Birth Certificate on data availability and accuracy. One of the areas that will be closely monitored is the report of maternal smoking. The results will be compared to other smoking data sources such as ESMIPR, and the BRFSS. We expect to complete the study by the end of 2009.

### **State Performance Measure 4: *The birth rate among girls 10-14 years of age***

#### **Tracking Performance Measures**

[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

<b>Annual Objective and Performance Data</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
Annual Performance Objective	2	1.1	1	1	1
Annual Indicator	1.5	1.4	1.2	1.1	1.0
Numerator	216	206	170	164	146

Denominator	148916	148457	147621	146465	144527
Data Source					Birth Certificate OITA
Is the Data Provisional or Final?				Provisional	Provisional
	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
Annual Performance Objective	1	1	1	1	1

#### **Notes - 2008**

Updated data for 2007.

2008 Numerator: Data obtained from the Office of Informatics and Technology Advances (OITA) of the Department of Health.

2008 Denominator: Population estimates of the US Census.

#### **Notes - 2007**

Updated data for 2007. For source of information refer to 2006 notes.

#### **Notes - 2006**

Numerator: Office of Informatics and Technology Advances (OITA) of the Department of Health. Data for 2006 is preliminary.

#### **a. Last Year's Accomplishments**

The birth rate of the age group 10-14 in PR decreased once more from 1.2 per 1,000 in 2006 to 1.1 in 2007. This birth rate has had a statistically significant decrease of 54% during the past 10 years, from 2.4 per 1,000 in 1997 to 1.1 per 1,000 in 2007. The MCH Division continued using the Positive Youth Development (PYD) model as its main strategy to promote youth health and prevent high risk behaviors such as premature and unprotected sex which can lead to teen pregnancy. The final versions of the six modules of the culturally appropriate PYD Action Guide for Puerto Rico were finished.

The Adolescent Health Program of the MCH Division (SISA, Spanish acronym)) continued the Juvenile Health Promoter's Project (JHPP) in 36 public middle schools in Puerto Rico. A total of 600 JHPs ages 12-15 organized and held 164 activities to reach 6,607 fellow students, parents and the general public during the school year. They were focused on health promotion and dissemination of high risk behaviors' prevention messages including avoidance of early, unprotected sexual relationships that may lead to teen pregnancies and other consequences. The JHPP Demonstration Project continued in two (2) Juvenile Detention Centers. Seventeen (17) males and 17 females participated as Juvenile Health Promoters in the project's workshops and activities that included healthy self esteem, positive personal relationships, sexuality education and future goals setting.

The SISA Regional Coordinators conducted 438 educational activities about adolescence health promotion and risk prevention to 9,526 participants island-wide. In addition, the MCH personnel offered 3,613 interventions on teen pregnancy prevention, sexuality education, self esteem, sexual development and other related themes to 65,977 students and adults. Also, of a total of 286 pregnant females attending sixteen (16) "Comenzando Bien" workshops, approximately 48% were pregnant teens.

The Secretary of Health issued March: Teen Pregnancy Prevention Month in Puerto Rico. During March, 2008 the JHPs and MCAH personnel held 98 additional teen pregnancy prevention activities reaching 3,450 students and adults. A total of 883 teens in the eight (8) PR's DOH regions participated in forty-six (46) open forum discussions ("Conversatorios") about dating ("noviazgo"), and teen pregnancy guided by SISA Coordinators. This strategy promotes healthy communication between teens and adults and help adults understand adolescents' views about teen pregnancy. The information gathered was forwarded to MCH anthropologist for analysis in

order to identify new strategies and initiatives. The first Teen Summit Encounter "Creando Lazos de Unión" of JHPP delegates, school facilitators, SISA Coordinators and other DoH personnel was held in May 2008. Thirty-two (32) youth delegates from 19 schools participated in workshops and activities to gather their input about the Project's future activities and youth participation.

"Plain Talk/Hablando Claro" Demonstration Project reached its third year as a collaborative effort of Annie Casey Foundation, Naranjito Teen Program (NTP) and PR's MCH Division. The site was able to reach the goal of 50% saturation level in the community. With a population of 300 residents they were able to meet this goal by completing 22 sets or 44 individual sessions of "Vecino a Vecino" (V-V) educational meetings and 105 Community Forums. Over the three year period 210 (duplicated) residents (97 unduplicated participants) participated in the V-V meetings and 1,387 individuals including residents, policymakers, educators, healthcare providers and other partners participated in the many forums where the Plain Talk messages were shared.

The Puerto Rico Abstinence Education Program (PRAEP) sponsored 631 activities reaching 37,788 participants. PRAEP provided WAIT Training and Game Plan curriculums and PYD strategies to 183 teachers of public and private schools and mentors. Interactive workshops for parents and teens reached 420 persons. A mass media campaign "LOCS" (The Other Face of Sex) was launched and its website was visited by 74,489 persons. An educational activity closed LOCS media campaign with 1,457 participants. PRAEP "Leaders for Wise Decisions" held 4 summits and follow up workshops to 67 students and 22 community leaders.

**Table 4b, State Performance Measures Summary Sheet**

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Disseminate Positive Youth Development (PYD) by using the Action Guide and Train the Trainer curriculum developed by "Reto y Esperanza" Project.			X	
2. Support the Naranjito PYD community pilot program in order to promote positive and healthy development of teens and prevent risk behaviors.		X		
3. Coordinate educational activities in schools and communities to promote healthy behaviors and prevent teen pregnancies.			X	
4. Continue SISA's Juvenile Health Promoters Project (JHPP) in public middle schools and the JHP pilot project in 2 Juvenile Detention Centers.			X	
5. Facilitate the development of culturally appropriate educational materials and PYD activities organized by teens to promote healthy behaviors and prevent teen pregnancies.			X	
6. Increase awareness of the consequences associated with teen pregnancies among health professionals and the general public including parents and communities.			X	
7. Support the Plain Talk pilot project developed to enhance parent-child and adult-youth effective communication about sexuality, prevent teen pregnancies and STDs. Review results of its evaluation and consider disseminating it.			X	
8. Collaborate with PRAEP activities directed at promoting sexual abstinence and parents' communication with their children regarding sexual abstinence to prevent teen pregnancies.			X	
9.				
10.				

**b. Current Activities**

The implementation of PYD model as a teen pregnancy prevention strategy continues. Naranjito's Initiative is spreading PYD in its communities. PYD Action Guide modules are being revised as a result of pilot test evaluation done with 12 adults.

JHPP continues with 594 youths in 37 public middle schools. A meeting with the DoE Health Education Director was held to address challenges of the JHPP implementation in public schools. As a result, an endorsement letter was signed by the new Secretary of Education to assure the continuation of the project. The JHPP in Juvenile Justice continues with 10 youths in the girl's facility. Island wide activities were held in March: Teen Pregnancy Prevention Month.

MCAH anthropologist analyzed last year's "Conversatorios" to identify new strategies and initiatives. MCAH is carrying out the research study: "Pregnancy and Motherhood: Cultural Perspectives of High School Teen Mothers and Pregnant Teens in the Bayamón Health Region". It aims at exploring the cultural views of female adolescents on teen pregnancy and motherhood through qualitative interviews. Plain Talk/"Hablando Claro" Project reached its final phase conducting the 2nd Community Mapping Survey.

PRAEP offered educational activities to train teachers and community members in the project's strategies. A new mass media campaign targeting parents started and interactive workshops for parents and teens were held. Coalition development and community outreach efforts continued.

**c. Plan for the Coming Year**

The MCH Staff, including SISA, will continue to address the issue of pregnancies among adolescents stressing the use of PYD strategies. Revised PYD Action Guide modules will be pilot tested with SISA' Adolescent Regional Coordinators which in turn will become trainers of the intervention as PYD Promoters. They are expected to disseminate PYD in their region's MCH personnel, government and community entities. The PYD Action Guide and training will also be made accessible to other interested adults and youths to become PYD Promoters.

SISA Program's Juvenile Health Promoters Project will continue and expand in public schools with the support of Department of Education endorsement letter. The evaluation of the three year cycle JHPP 2006-2009 will be started. The curriculum guide "Jóvenes Saludables en Acción" and the Implementation Guide will be revised after the evaluation. The Health Promotion Schools Initiative will be considered as a collaborative effort of DOH and DoE in participating JHPP Schools. The JHPP demonstration project in juvenile justice institutions will continue. SISA Collaboration with programs that provide services and support for pregnant and parenting teens will continue. MCH visiting nurses will continue offering interconceptional services to adolescent participants to promote they space their future pregnancies.

The report of "Hablando Claro" Project 2005-2008 made by the Annie E. Casey Foundation will be shared with the Naranjito' La Sabana community residents, to stakeholders and professionals that contributed to the initiative. Project's next steps will be considered.

The report of the study "Pregnancy and Motherhood: Cultural Perspectives of High School Teen Mothers and Pregnant Teens in the Bayamón Health Region" will be completed and distributed among interested health, educational and human service professionals. The results of the study will be used also to develop culturally appropriate strategies for teen pregnancy prevention and health promotion among Puerto Rican youth and specifically in the Bayamón health region.

The MCH Division will continue gathering information from Vital Statistics to analyze trends in teen birth rates by age groups to actualize data for each municipality. This information will be used by SISA in educational presentations and collaborative efforts with different government agencies and in each DOH region to address teen pregnancy prevention's specific initiatives.



Meetings will be convened in each health region's selected municipalities to work out strategic collaborative plans between government agencies, NGO's and youths to develop specific plans, implementation and evaluation using the PYD model. SISA will educate parents and adults on the importance of establishing connections and communicate with teens in order to protect them from engaging in high risk behaviors.

PRAEP as other abstinence projects will not receive continuation funds for the years to come.

## **State Performance Measure 5: *The rate of cesarean section in Puerto Rico***

### **Tracking Performance Measures**

[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

<b>Annual Objective and Performance Data</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
Annual Performance Objective	40.4	38.2	36	34.8	32.6
Annual Indicator	47.7	48.1	48.3	49.3	48.5
Numerator	24458	24390	23563	23011	22089
Denominator	51223	50687	48740	46719	45569
Data Source					Birth Certificate OITA
Is the Data Provisional or Final?				Provisional	Provisional
	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
Annual Performance Objective	30.4	28.2	26	23.8	21.6

#### **Notes - 2008**

Updated data for 2007. Data for 2008 provided by the Office of Informatics and Technology Advances (OITA) of the Department of Health.

#### **Notes - 2007**

Updated data for 2007. For source of information refer to 2006 notes.

#### **Notes - 2006**

Numerator and Denominator: Preliminary data provided by the Office of Informatics and Technology Advances (OITA) of the Department of Health.

#### **a. Last Year's Accomplishments**

The constant rise of cesarean section (C/S) rates has been a matter of public health concern for almost two decades in PR. To explore contributing factors and to develop strategies that may help reduce this event, the MCH Division of the DoH performed several studies beginning in 2000. This three-phased research consisted initially of the review of birth certificates of infants delivered by C/S during the 1990-1999 periods. Among the results, this study disclosed that C/S deliveries occurred mainly during workdays and daytime hours. The highest rates were among women 20-34 years old and those with more than 12 years education. Also, the C/S rates were higher for women with private health insurance, followed by those covered by the government plan. This study was followed by an evaluation of records from a sample of live births delivered by C/S in 1999. Indication to justify a C/S delivery was not documented in 77% of the charts. In the third study, a representative sample of women in pp wards who delivered in 2004 answered a self-administered questionnaire to explore how a woman's and her relatives' attitudes and beliefs regarding pregnancy and the delivery process, and the health care provider's personal and practice characteristics, may influence when choosing the delivery method. The survey results suggested that physicians' attitudes and beliefs could be contributing to the delivery method selected. None of these studies identified a causal factor to explain the high C/S rate in the Island.

A Committee for the Evaluation and Reduction of C/S in PR was established during the research phase of the previously mentioned studies to review the results, and to discuss the 2006 NIH Consensus document that could not contribute conclusive evidence against doing a C/S delivery upon maternal request. The Committee failed to provide new approaches to the problem. The members met again in Feb 2008 to discuss new proposals, mainly addressing the lack of available obstetricians to provide services for pregnant women in PR, maybe due to emigration to other states and territories, economic situation or fear of malpractice suits. One of these proposals was to promote a public policy to provide tax credits to hospitals that offered paid leave to nurses while they studied to become certified nurse midwives. This approach could increase the number of licensed midwives available to provide additional help to obstetricians in their patients' routine prenatal, intrapartum, and postpartum care. Another alternative was to promote the implementation of an obstetrics hospitalist program to help reduce the obstetricians' amount of work and to assure a qualified health professional at all times in hospitals to provide services in the delivery room. Hopefully, these proposals would help prenatal health providers and birthing hospitals reduce their C/S rates.

MCH staff continued to provide educational opportunities to raise awareness on the issue among pregnant women, health care professionals and at community level. During January-December 2007, HV nurses gave individual orientations and educational activities to all 6,390 participants of the HVP. CHWs, as well, offered 18 learning activities on the topic to 365 persons. Also, perinatal nurses provided information to pregnant women they came in contact with regarding the benefits and risks of both cesarean and vaginal deliveries.

**Table 4b, State Performance Measures Summary Sheet**

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Continue monitoring the tendency in C/S rates in Puerto Rico by using vital records information.				X
2. Continue offering educational activities to women of reproductive age about the indications and dangers associated with a delivery by C/S to raise their awareness and to empower them to prevent needless cesarean deliveries.			X	
3. Continue providing educational activities and one-on-one orientations at home interventions by HVN to participants of the Program regarding important aspects related to a cesarean delivery.			X	
4. Help develop a public policy aimed at reducing C/S deliveries that requires pregnant women be oriented on the birth process and delivery options and have a document certified by their health provider to be handed over when admitted to labor room.				X
5. Assemble the DoH Committee for the Evaluation and Reduction of C/S in PR when new proposals arise to deal with the constant increase in C/S rates in the Island.				X
6.				
7.				
8.				
9.				
10.				

**b. Current Activities**

To continue highlighting the issue regarding the alarming increase in deliveries by C/S in the Island, the MCH staff keeps on providing educational activities at all population levels. During January-December 2008, HVN offered one-on-one interventions and educational events on the

indications for and the risks of a C/S delivery to all 6,527 HVP participants. CHWs have continued offering educational activities on the subject at community settings.

The Academy of Medical Directors of PR held an educational event on maternal and health issues in November 2008 aimed at health care professionals. The current situation of C/S deliveries in Puerto Rico was included as part of a presentation on the epidemiology, factors and causes of infant mortality.

An Executive Order was issued by the Governor in Aug 2008 to create a commission to address the increasing trend of deliveries by C/S in PR. An administrative order by the Secretary of Health followed in Dec 2008 to establish a public policy to reduce the trend of C/S procedures in the Island and promote vaginal deliveries. The MCH Obstetrics Consultant and the Division Director, also an obstetrician, took part in the elaboration of the public policy.

A non-governmental non-profit group (PROMANI, Spanish acronym) posted information on the subject of avoiding unnecessary C/S procedures at their website to raise awareness at community level during Cesarean Awareness Month in April 2009.

### **c. Plan for the Coming Year**

The MCH Program will take advantage of all opportunities available to bring forth the issue of the alarming increase of C/S deliveries in PR in an attempt to reduce this trend.

All the results of our investigations will be shared with health care providers, particularly those engaged in maternal and child health care, and other key partners, to increase their knowledge on the issue as well as their compromise in reducing the number of unnecessary C/S procedures in PR. We will endorse and collaborate with continued education activities aimed at raising the level of awareness on the subject among health providers and other interested parties as well.

We will also maintain a constant monitoring of C/S rates in the Island through VS data. The MCH Section for Monitoring, Evaluation, Investigation and Systems of Information will be in charge of this activity. A yearly notification will be sent to the administrators of health institutions regarding their C/S rates in an effort to elicit their self evaluation on the issue. Feedback on their part will be welcomed. We will conduct an interview with hospital administrators and the head of the Obstetrics Departments in those institutions with lower C/S rates to identify factors that may be contributing to this achievement. An analysis will follow based on the information gathered, and conclusions may hopefully produce strategies directed at reducing or eliminating causal factors of high C/S rates, to implement in other hospital settings with this problem.

MCH staff Island wide will continue providing one-on-one orientations and group educational activities on important aspects regarding C/S deliveries to women of reproductive age. Features addressed will include their right and responsibility of making a well informed decision when choosing a delivery method based on adequate information on the delivery options and the risks involved with each.

The MCH Division will review the Administrative Order established in December 2008 by the Secretary of Health. A brochure as well as a poster with relevant information regarding the birth process, including the indications, benefits and risks of both vaginal and cesarean deliveries, and the women's rights and responsibilities, will be developed and distributed at all health facilities. We will also generate a document to certify that the health provider offered orientation on the subject to the pregnant woman and to be included in her prenatal record and be available as evidence at the moment she is admitted to deliver at a health institution.

The MCH Division will continue promoting innovative approaches intended for the reduction of

C/S deliveries in PR, such as the one which provided tax credit to health institutions that offer paid leave to nurses to become certified midwives, as well as the implementation of obstetrics hospitalists programs.

**State Performance Measure 6:** *Develop and maintain an active surveillance system for at least 55 birth defect diagnoses by 2010.*

Tracking Performance Measures

[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

Annual Objective and Performance Data	2004	2005	2006	2007	2008
Annual Performance Objective			87	87	87
Annual Indicator	69.1	69.1	69.1	78.2	87.3
Numerator	38	38	38	43	48
Denominator	55	55	55	55	55
Data Source					Birth Defect Surveillance System
Is the Data Provisional or Final?				Final	Final
	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
Annual Performance Objective	100	100	100	100	100

**Notes - 2008**

Data for 2008 provided by the Birth Defects Surveillance System of the Puerto Rico Department of Health.

**Notes - 2007**

The source of both the numerator and denominator is the BDSS.

**Notes - 2006**

The Birth Defects Surveillance System (BDSS) continues with population based active surveillance activities for 38 birth defects diagnoses in 100% of birthing hospitals, and at four pediatric hospitals in the Island. We were able to add 5 more birth defects starting January 1st, 2007. These defects are: single ventricle, double outlet right ventricle, hipospadias, epispadias, and Jarcho-Levin syndrome.

**a. Last Year's Accomplishments**

To expand the capacity of the BDSS to identify birth defects cases and provide accurate statistics to other programs and agencies in a timely manner for program planning and evaluation, the BDSS case definition was revised to include 5 additional diagnoses: microtia, anotia, microphthalmia, anophthalmia and bladder exstrophy for a total of 48 BD under surveillance, the abstractor guidelines were updated to include pertinent information on these 5 new defects, and educational material regarding the 5 new defects was developed and shared with the abstractors and all birthing hospital staff.

In January 2008 an additional abstractor was recruited for the Metropolitan Area. She was trained during the months of February and March; in March she started visiting hospitals and collecting data on cases. The protocol for database management and analysis was updated and it is currently used by all members of the BDSS staff. The one page form to address missing or ambiguous data in the abstractor form was updated.

To improve BDSS database completeness linkages between the BDSS and Vital Records and other data sources were completed. From 2006 vital records linkage we were able to capture 16 cases not included in the data base. In January 2008, the Down Syndrome Foundation of Puerto Rico began reporting children with Down syndrome born on and after 2001. We have been able

to capture 19 cases not included in the data base. A total of 100 children with BD were identified prenatally through the University District Hospital High Risk Clinic; 71% (71) of them have been born and diagnosis confirmed. Identified prenatal BD: neural tube defects (31%), gastroschisis (17%), congenital heart disease (17%), trisomies 21, 18 and 13 (16%), Jarcho Levin Syndrome (6%), omphalocele (4%), cleft lip/cleft palate (5%), talipes equinovarus/club foot (3%) and ambiguous genitalia (1%).

Counseling and educational material through the BDSS was provided only to 27.5% of families with children with BD, identified by the BDSS due to staff limitations. A comprehensive system for referrals to the Early Intervention Services System, Children with Special Health Care Needs (CSHCN) Pediatric Centers and other programs that offer early services was developed. A referral protocol was established island wide and it is currently used by all the abstractors. A total of 138 children with BD were referred to the CSHCN Pediatric Centers in 2007. Of these children 41% received services at the CSHCN, 54% decided to receive services elsewhere and 5% died before leaving the hospital.

The BDSS Annual Report with data from 2006 was published and distributed to 5,000 health professionals in June 2008 as one of the dissemination of data and information related to birth defects activities. BDSS information and statistics was also included in the DoH website, updated in January 2008, and is available at [www.salud.gov.pr](http://www.salud.gov.pr) under "programas operacionales". Also, we published our surveillance outcomes in the peer review journal "Birth Defects Research Part A: Clinical and Molecular Teratology". The surveillance data were also used for research. We actively collaborate with the Neural Tube Defects Rapid Ascertainment CDC Project. The BDSS also collaborated with the University of Puerto Rico, Cayey Campus, in an NTD Risk Factors Study. A protocol to investigate BD clusters was developed and used to investigate a possible cluster of hypospadias in the northern area of the Island.

During the year, the BDSS staff visited hospitals and provided trainings on the importance of reporting cases and the natural history and etiology of birth defects. We promote compliance with the BD Surveillance Law among health service agencies and health care provider; 541 additional copies of the Bill and its Regulations were distributed to pertinent parties.

**Table 4b, State Performance Measures Summary Sheet**

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Continue the active BD surveillance system activities such as data collection, protocol updates, data analysis and evaluation.				X
2. Coordinate activities with our collaborators to promote healthy lifestyles in order to prevent birth defects and to organize and conduct activities associated with BD prevention month celebrations in PR.			X	
3. Improve the referral system to CSHCN centers for children with birth defects.		X		
4. Offer genetic counseling to affected families.			X	
5. Monitor periodically the existence of birth defects clusters.				X
6. Develop culturally sensitive educational materials on the BDSS birth defects.			X	
7. Offer trainings on the birth defects surveillance system to hospital staff, and health care professionals throughout the Island.				X
8. Prepare and publish the Annual BD Report in order to disseminate the surveillance results.				X
9. Disseminate regulations and promote compliance with Law				X

351 among health care providers, including the importance of early diagnosis and referral to specialized services.				
10. Use GIS technology to visualize and study the geographic distribution of birth defect cases.				X

#### **b. Current Activities**

We continue with our active, population based BD surveillance system. In January 2009, 3 BD diagnoses were eliminated because of a significant sub report for the 3 conditions. This is due to: a) lack of diagnostic information, and; b) women giving birth outside PR after prenatal diagnosis was confirmed. We also included 1 new diagnosis (ASD Primum) in the case definition, for a total of 46 BD under surveillance. All BD diagnoses included in the case definition are being reviewed. Also, an abstraction audit is being done for hypospadias cases. We improve our report forms to enhance specificity of the BDSS. We continue to link VS records and BD surveillance data sets to identify cases that might have been missed. The BDSS Annual Report with 2007 data will be published in June 2009. We participated in the Multi-State Study of the Epidemiology and Regional Variation of the Clubfoot. A symposium on BD to update and increase knowledge among health professionals is being coordinated.

We continue to provide genetic counseling and to refer to the CSHCN centers all eligible children. An evaluation of the referral system showed a need to expand the providers for referral outside the CSHCN centers. Also a provider directory is being developed. In February 2009, we attended the Birth Defect Prevention Network Meeting where we presented a poster entitled Pilot Evaluation of the Satisfaction with Services of Families Referred to the CSHCN Pediatric Centers by the PR BD

#### **c. Plan for the Coming Year**

Next year, we will continue our active surveillance for the 46 birth defects included in the BDSS and with the BD prevention activities required by Law 351. We will modify the current surveillance protocol as needed. Monthly trainings will be held with the abstractors in order to improve their abstracting skills. Among the topics to be covered are the different aspects of the birth defects surveillance system as well as the natural history and etiology of birth defects. We will continue performing record linkage with vital statistics data, medical insurance companies, and other agencies in order to improve the completeness of our database. In addition, we plan to maintain our efforts toward establishing new partnerships with entities that may help us identify additional data sources and thus increase our potential to identify all birth defects cases included in our surveillance system. We will continue with the process of geocoding our database and preparing spatial maps that will help us visualize the geographic distribution of birth defects in Puerto Rico. We are developing a BD risk factor questionnaire to interview all parents identified with affected pregnancies in order to maintain a surveillance of BD risk factors along with the BD surveillance.

We will continue to provide genetic counseling and to refer to the CSHCN centers all eligible children and to other specialists in our provider directory, once the provider directory has been developed. A copy of this directory will also be distributed to all birthing hospitals. We will develop and implement a tracking system to enhance the referral protocol and ensure timely referral to services as well to assess service utilization.

We will continue to disseminate an annual surveillance result report and to increase awareness of birth defects prevention measures among the general population and health care professionals. The sixth BDSS Annual Report with 2008 updated statistics will be prepared and published by June 2010. We will continue to publish our surveillance outcomes in the peer review journal "Birth Defects Research Part A: Clinical and Molecular Teratology". In addition, culturally sensitive educational materials on 6 BD: gastroschisis, omphalocele, oral clefts and trisomies 13, 18, and 21, which have been developed, will be printed for distribution. We also plan to offer health care providers educational activities with the purpose of promoting awareness of the need to continue promoting birth defects prevention messages and to make them aware of the surveillance

activities currently occurring in PR.

Efforts to reinforce PR Alliance for Birth Defects Prevention membership will continue. We will identify and invite potential collaborators and stakeholders to become new members. The BDSS will celebrate BD prevention month with a series of activities during the month of January 2010. During this time a mass media campaign will be coordinated to promote BD prevention messages.

**State Performance Measure 7:** *Reduce the prevalence at birth of neural tube defects (NTD's)*

**Tracking Performance Measures**

[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

<b>Annual Objective and Performance Data</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
Annual Performance Objective	4	4	3	6	6
Annual Indicator	5.2	10.3	7.4	10.5	7.7
Numerator	27	52	36	49	36
Denominator	51776	50687	48744	46717	46717
Data Source					Birth Defect Surveillance System
Is the Data Provisional or Final?				Provisional	Provisional
	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
Annual Performance Objective	6	5	5	5	5

**Notes - 2008**

Updaed data for 2006 and 2007. The source of the 2008 numerator is the BDSS, and the source of the denominator is the Vital Statistics Live Birth Certificates. For year 2008 the denominator was estimated using the counts from 2007.

**Notes - 2007**

The source of the numerator is the BDSS, and the source of the denominator is the Vital Statistics Live Birth Certificates.

**Notes - 2006**

The annual objective and performance data was revised after a validation effort of our datasets. Therefore, our annual indicators are higher than shown on the table; for 2004 the annual indicator was 8.4. The Birth Registry final database for 2005 is preliminary; we are in the process of gathering data from the 2005 vital statistics to perform record linkage between the data bases. The 2006 prevalence ratio is provisional since the total live births for 2006 is not available yet, so it was estimated from the Birth Registry 2005 data. We are also awaiting data from August to December from two municipalities.

**a. Last Year's Accomplishments**

During 2007-2008, we continued promoting folic acid use to reduce preventable Neural Tube Defects (NTD). A wide variety of activities were developed to raise awareness about the importance of taking folic acid on a daily basis. BDSS staff participated in 66 health fairs around the island and reached 10,838 participants at the community level. A total of 57,482 educational materials and promotional articles have been distributed. MCH staff provided 1,175 educational activities during which folic acid promotion messages were provided. A total of 14,614 persons attended these activities. We developed new culturally sensitive educational materials and distributed them to health professionals. Our program established close collaborative efforts with insurance companies in order to have their health care providers take a more active role in

educating the population they serve about the benefits of folic acid and becoming active promoters of their daily intake. The BD Prevention Alliance continued to meet regularly. A total of 6 meetings were held. Most of them were devoted to planning major folic acid campaign activities.

On October 2007, we celebrated the 6th Folic Acid Awareness Day in 30 university campuses. Over 3,775 university students participated in the celebration. A total of 10,777 public schools students island wide were also impacted. Participating universities distributed educational material and MCH Division staff provided information on the importance of folic acid consumption for the prevention of NTD. All participating students received free samples of fortified cereals with 100% folic acid and promotional items.

In January 2008, we celebrated several activities to commemorate the Birth Defects (BD) Prevention Month. During these activities, we promoted the importance of daily folic acid intake, the prevention and treatment of diabetes, obesity and STD's like Chlamydia, hepatitis B, HIV and syphilis as strategies to prevent BD. As part of the activities held to celebrate BD prevention month we participated in 3 TV, 1 radio and 5 newspaper interviews. A one-page article was also published in "El Nuevo Día", the local newspaper with the largest circulation island wide. Other regional newspapers followed their lead and published additional articles. In addition, the Senate, 4 major banks, and 30 University branches distributed material containing prevention messages to their clients, employees, and students. Kits with information on BD prevention, prepared by the National Birth Defects Prevention Network (NBDPN), were distributed to 100 key collaborators. Members of the Alliance have also contributed to disseminate the message by publishing several articles in their companies' web pages.

A survey was developed and administered in collaboration with The Marketing Center Co. to evaluate the impact of the FA Campaign in PR. The data obtained is helping us refocus the campaign. We analyzed the data and the results were used to improve some of our strategies and messages. In February 2008, we attended the Birth Defect Prevention Network Meeting where we presented a poster of this evaluation entitled "Women Reactions to the PR Folic Acid Campaign". We were able to distribute 84 additional BD educational modules among health professionals. They included information on BD law, BD Surveillance System, a summary of major BD, and folic acid. We were able to offer 5 CME credits those who completed it.

During the year, BDSS staff made efforts to increase BD awareness among health professionals on the topics of preconceptional health, birth defects prevalence and their prevention, natural history and etiology. During this year, we gave a total of 21 lectures attended by 1,975 persons; 8 to 485 health professionals, 6 at the community (820), and 7 to 670 teachers of the Department of Education. The post intervention evaluation for the instructional modules included in the public schools curriculum was done and the results were use to design new strategies to promote compliance with the existing DoH Public Policy which recommends taking a multivitamin containing 400 micrograms of folic acid daily for all women 10 years of age or older. The collaborative effort between the Department of Education and the Folic Acid Campaign provides for the inclusion of folic acid prevention messages in the public school health curriculum at the elementary, middle and high school level on a permanent basis.

**Table 4b, State Performance Measures Summary Sheet**

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Increase awareness among primary care providers of the need to recommend daily folic acid consumption.			X	
2. Use trained insurance company personnel to promote use of daily folic acid among patients visiting medical offices.			X	
3. Hold meetings with key stakeholders to develop strategies				X



directed at increasing use of folic acid.				
4. Promote the use of the Folic Acid Educational Module among teachers covering health issues in PR schools.			X	
5. Coordinate activities to increase awareness of birth defects and strategies to prevent them among the general public.			X	
6. Coordinate Folic Acid Awareness Day observances in local university campuses.			X	
7. Educate students in health-related fields regarding their role in promoting the use of folic acid.			X	
8. Continue interagency collaborative efforts to promote use of folic acid in the media.				X
9. Continue regular meetings of the State Alliance for Birth Defect Prevention.				X
10. Evaluate levels of folic acid awareness and consumption among women of reproductive age.				X

#### **b. Current Activities**

The benefits of folic acid consumption and information regarding NTD prevention continue to be provided at the community level. We have participated in 21 health fairs and reached 638 participants at the community level. We provided all MCH staff (visiting nurses, health educators, community health workers, and social workers) with current folic acid and other BD prevention messages. We also trained all health educators of one of the major insurance companies. The folic acid public health policy was amended to update folic acid prevention messages. We have distributed 32,434 educational material and promotional incentives. The FA Awareness Day was held on October 2008. The Alliance for BD Prevention has hold 6 meetings. Eight island wide coverage radio stations disseminate 1 BD prevention public service announcement and 1 TV station disseminated the 2 BD prevention commercials filmed with the collaboration of the Alliance for BD Prevention.

ESMIPR 2008 data showed that just 21% of surveyed women consumed FA daily one month prior pregnancy. The PR BRFSS 2008 folic acid module data will also provide us additional information. We are now in the process of updating the FA instructional module included in the public schools curriculum with the collaboration of the Department of Education. We also were able to develop a second edition of the BD educational module, which now includes a full section on preconception care. For those who completed it, we will offer 6 CME credits.

#### **c. Plan for the Coming Year**

For the coming year, we plan to continue offering educational activities. We will continue with our efforts toward increasing the level of awareness among birthing hospitals staff and health care providers of their need to promote daily folic acid intake. In addition, we plan to increase their knowledge regarding additional birth defect prevention strategies and the surveillance activities that are occurring island wide. We will give an update to all health science teachers on BD prevention messages and will promote the inclusion of the second edition of the folic acid instructional module at the Junior and Senior High School level.

The distribution of culturally sensitive educational materials that include messages related to the importance of daily folic acid use and other birth defects prevention strategies will continue when we participate in health fairs at the community level, schools, universities, public and private agencies. MCH staff will also continue offering educational activities for the promotion of daily folic acid use. In addition, we will continue to promote the collaborative efforts we have already established with local health insurance companies in order to have their health care providers help us to increase folic acid awareness level and actively promote daily folic acid intake among their clientele. Our annual celebration of the Folic Acid Awareness Day will be held at local

universities and public schools facilities, in October 2009. In January 2010, we expect to again celebrate BD prevention month with a series of activities.

We plan to continue supporting the PR Alliance for Birth Defects Prevention in their efforts and with their help continue to develop and distribute culturally sensitive educational materials. We will continue our collaborative efforts with other agencies and stakeholders to develop additional strategies to prevent NTD's. A Preconceptional Health Committee was established and alongside them and all of our other collaborators we plan to promote preconceptional messages that help prevent birth defects.

To monitor compliance with folic acid use in WCBA, MCH continues conducting the ESMIPR survey. Results from the 2010 bi-annual PRAMS-like survey will be available by the end of the summer 2011. It will provide us with data regarding daily folic acid use. To monitor compliance with folic acid use in adolescents, 5 questions regarding folic acid use will be included in the YRBSS in 2009. Also, we will coordinate teen focus groups to develop new strategies on how to disseminate folic acid messages among teens.

### **State Performance Measure 8:** *The rate of deaths to children aged 1-14 caused by asthma*

#### Tracking Performance Measures

[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

<b>Annual Objective and Performance Data</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
Annual Performance Objective	0.2	0.2	0.2	0.1	0.1
Annual Indicator	0.2	0.2	0.1	0.4	0.1
Numerator	2	2	1	3	1
Denominator	815120	803507	791992	774347	758825
Data Source					Death Certificate OITA
Is the Data Provisional or Final?				Provisional	Provisional
	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
Annual Performance Objective	0.1	0.1	0.1	0.1	0.1

#### **Notes - 2008**

Updated data for 2007.

2008 Numerator: Data obtained from the Office of Informatics and Technology Advances (OITA) of the Department of Health.

2008 Denominator: Population estimates of the US Census.

#### **Notes - 2007**

Updated data for 2007. For source of information refer to 2006 notes.

#### **Notes - 2006**

Numerator: Preliminary data obtained from the Office of Informatics and Technology Advances (OITA) of the Department of Health.

Denominator: Population estimate obtained from the US Census for Puerto Rico.

#### **a. Last Year's Accomplishments**

In 2007, there were 3 asthma related deaths in the 1-14 age group and in 2008, no deaths were reported. To prevent them, SAP committees defined priorities and the interventions implemented based on a needs assessment, data from the PR Asthma Surveillance System (PRSS) and other partners' input. Interventions implemented included: public policy development, PRSS expansion;

improvement of the DW; identification of areas with high rates of morbidity, mortality and services utilization; training PCPs and health professionals in asthma management; sharing SAP and PRSS report.

The Public Policy Committee continued working to increase the number of GIP asthma patients on long-term medications.

The AP offered ten (10) CME trainings to PCPs and health professionals on the use of NAEPP Asthma Treatment Guidelines in areas with the high rates of asthma morbidity and mortality. A total of 424 persons participated. Participation turnout was excellent since 85% of those pre registered attended. Local HICs helped identify and invite PCPs. The main goal is to help PCPs and other health professionals provide quality care and education to children and adults with asthma. Topics included are: SAP, PRSS data; basic concepts on the diagnoses of asthma; the best treatment for the asthmatic patient and strategies to prevent asthma, and study cases. Materials were provided by Proyecto CALMA, PR Lung Association and the speakers. Adult Asthma Management guidelines and pocketguides for asthma management in adults and children were distributed during trainings. Asthma trainings were favorably evaluated. Participants' recommendations included expanding trainings to the general public, hospitals and other professional of the GIP to assure correct use and prescription of asthma medications and patient follow-up.

Health Educators and nurses of health regions provided 220 activities on asthma and associated trigger factors reaching 2,603 participants.

PRSS obtained health care utilization data and layout of all Medicaid population (2003 to 2007) from the PR Health Insurance Administration (PRHIA) which is the government agency that makes contracts with Independent Practice Associations (IPA's) to provide GIP services; debugged and maintained the occupational asthma, health insurance and the Behavioral Risk Factor Surveillance System (BRFSS) Data Warehouse (DW) structure process; and participated in activities for the dissemination of PRSS data.

PRSS started updating the PR asthma epidemiological profile based on health services utilization (2004-2007), mortality (2000-2006) and prevalence (2000-2007). The childhood random selection, childhood asthma prevalence and adult asthma history modules were included in 2008 BRFSS. A preliminary report on Work Related Asthma was presented to State Insurance Fund (SIF) officials. This served as an input to improve the quality of the data collected in WC claims.

WAD activities included a press conference by the Secretary of Health to present the SAP and Epidemiological Asthma Profile. Other activities included: an asthma supplement in one of the newspapers (205,000 copies), and a media tour (3 radio talk shows) emphasizing in the empowerment of patients in asthma self-management.

The AP participated in the elaboration of Clean School Bus proposal submitted to EPA to reduce school bus idling time and to start a "retrofitting" program with Diesel Oxidation Catalyst.

MCH staff supported the SAP implementation phase and monitored its progress towards achieving this performance measure and other asthma related indicators.

**Table 4b, State Performance Measures Summary Sheet**

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Hold meetings with SAP Focus Areas Committees to prioritize interventions based on identified needs and PRSS data.				X
2. Promote policy changes for asthma care and management.				X

3. Continue asthma surveillance system to assess asthma morbidity, mortality, utilization of health services and work-related asthma.				X
4. Train health professionals in asthma management according to NAEPP asthma management guidelines.				X
5. Analyze and interpret asthma data, and report findings and recommendations to key stakeholders.				X
6. Meet Healthy People 2010 objectives for respiratory diseases by implementing the State Asthma Plan.				X
7. Collaborate with asthma educational programs including EPA's Clean School Bus USA, Schools: An Asthma Friendly Environment (SAFE), and other initiatives of State Asthma Plan partners.				X
8. Implement the State Asthma Plan as part of the CDC Asthma collaborative agreement. Focus Areas include: Partnerships, Surveillance, Health Promotion and Education, Public Policy, Environment, Access to Health Services, and Evaluation.				X
9. Increase level of awareness among key stakeholders and the general population regarding asthma in PR and the State Asthma Plan.			X	
10.				

#### **b. Current Activities**

Six trainings on asthma management held reaching 418 professionals. Health Educators/ nurses provided 297 asthma activities reaching 2,673 persons.

Asthma self-instructive module with CME distributed to 1,700 professionals. Asthma brochure was distributed to pediatric centers and other agencies.

PRSS updated epidemiological profile based on services utilization, mortality and prevalence. Asthma modules and Call-back questions included in '09 BRFSS. SIF staff trained to improve quality of data collected in WC claims.

MCH Division continues implementing SAP activities: public policy development; PRSS expansion; identification of areas with high rates of morbidity, mortality and services utilization; trainings; sharing SAP and PRSS report.

SAP Partnerships Committee helped install Coalition's Ponce Chapter.

AP collaborated with EPA's Clean Bus project educating owners of one municipality about effects of CO and advantages of retrofitting buses. Agreements for retrofitting started 2/09. AP collaborated with Schools: An Asthma Friendly Environment (SAFE) project presenting PRSS data to school teachers.

Due to Public Policy Committees' work, Administrative Order #248 was signed to improve access to long-term medications and specialized services in patients 0-17 beneficiaries of GIP.

Dissemination activities included an asthma supplement reaching 250,000 copies.

WAD activities included press conference with Secretary of Health to present SAP and Epidemiological Profile, and a media tour.

#### **c. Plan for the Coming Year**

The MCHD will continue to conduct activities included in the SAP to meet the HP 2010 objectives for Focus Area #24. Some of these are: expanding the PRSS; identifying areas with the high asthma morbidity, mortality and utilization of services rates; training PCPs and other health professionals in asthma management; increasing the general public's level of awareness regarding the asthma situation in PR and activities that are going on; establish additional MOU's with data providers; implementing a plan to monitor program performance; public policy development; and expanding partnership activities throughout the island.

The PRSS will continue to prepare and submit annual surveillance reports based on health services utilization claims, mortality, prevalence and work-related asthma. Asthma questions will be included in the 2010 BRFSS questionnaire.

SAP and PRSS findings will be presented in different venues in order to raise awareness of the asthma burden PR is experiencing and efforts being carried out by the PRDoH and AP to reduce asthma morbidity and mortality.

The MCHD will continue to collaborate with the PR Clean School Bus Alliance, the SAFE Project, the health insurance companies, and with other PRAC member's asthma related educational interventions.

The AP will continue training HVN and health educators on the basics concepts related to asthma, identification of the signs and symptoms associated with the disease, control and prevention measures, identification of asthma trigger factors in the household and promoting indoor air quality in homes of patients with asthma.

## **E. Health Status Indicators**

### **Introduction**

*/2010/ Valid, trustworthy data is necessary to analyze and evaluate the health situation of a population, make decisions based on evidence and develop strategies to promote good health. To gather this information, a variety of health indicators are used to calculate and evaluate the different aspects of health of the population.*

*To assess the maternal and child health status, the MCH Division provides the Integrated Index of Maternal and Infant Health Status to the Regional staffs, which includes 15 indicators chosen from birth and death files, and separated by municipalities. Regional staffs, in turn, analyze the information provided for their particular region and include the identified needs in their action plan.*

*Regional MCH programs will continue disseminating important health information through SSDI Regional meetings as well as the publication of the MCH Health Status Book expected for the late 2009./2010//*

**Health Status Indicators 01A:** *The percent of live births weighing less than 2,500 grams.*

Health Status Indicators Forms for HSI 01 through 05 - Multi-Year Data

<b>Annual Objective and Performance Data</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
Annual Indicator	11.5	12.8	13.0	12.5	12.5
Numerator	5872	6504	6355	5817	5717
Denominator	51223	50687	48744	46719	45569

Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Provisional	Provisional

#### **Notes - 2008**

Updated data for 2007. Data for 2008 provided by the Office of Informatics and Technology Advances (OITA) of the Department of Health.

#### **Notes - 2007**

Updated data for 2007. For source of information refer to 2006 notes.

#### **Notes - 2006**

Numerator and Denominator: data provided by the Vital Statistics Office.

#### **Narrative:**

*//2010/ Low birth weight (LBW), very low birth weight (VLBW) and preterm birth are an increasing problem and constitute the number one cause of infant mortality in Puerto Rico. These indicators have been monitored through the years to determine the trend in LBW and VLBW births rates in Puerto Rico.*

*Since the year 2000 (10.8%) to 2006 (13.0%) the LBW rates have increased about 20%. Preliminary 2007 (12.5%) birth data reports a slight decrease of 4%, but this could change once we have the final data, therefore we will wait until the Vital Statistics database has been revised and information is made official before drawing conclusions based on this evidence.*

*Efforts to improve these indicators are conducted by the MCH Program. Through the HVP, the MCH Program provides case management/care coordination, health education and counseling to pregnant women with complex medical and social risk factors associated with LBW and VLBW infants. Furthermore the MCH Program is collaborating with March of Dimes designing a massive campaign aimed at women on reproductive age. The main objective of this campaign is raise awareness among this population about the importance of waiting the 40 week of gestation to give birth. By the end of this campaign, we expect to minimize the rate of late preterm births which compose 75% of all premature births.*

*The Prenatal Care Card (PNC Card) was developed by the MCH Program to ensure that the pregnant women have with them at all times information regarding their prenatal care and will be able to provide this information to ER providers during an obstetric emergency. ASES will distribute the PNC Card to all the insurance companies that offer services to GIP participants with the objective to standardize this information among this population.*

*The WIC Program also contributes toward reducing these rates by focusing on women who present nutritional risk factors. During fiscal year 2007-2008, the WIC Program provided services to 60,995 pregnant women.*

*The MCH Program provides educational interventions directed at HVN, providers and the population at large to increase awareness regarding the elevated LBW in PR and its implication for the infants' survival. During the activities, staff encourages WICBA to abstain from high risk behaviors and offer recommendation to reduce factors that contribute to these poor outcomes. //2010//*

**Health Status Indicators 01B:** *The percent of live singleton births weighing less than 2,500 grams.*

Health Status Indicators Forms for HSI 01 through 05 - Multi-Year Data

<b>Annual Objective and Performance Data</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
Annual Indicator	10.0	11.7	11.9	11.2	11.3
Numerator	5137	5798	5692	5150	5019
Denominator	51223	49675	47791	45793	44605
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Provisional	Provisional

**Notes - 2008**

Updated data for 2007. Data for 2008 provided by the Office of Informatics and Technology Advances (OITA) of the Department of Health.

**Notes - 2007**

Updated data for 2007. For source of information refer to 2006 notes.

**Notes - 2006**

Numerator and Denominator: data provided by the Vital Statistics Office.

**Narrative:**

*/2010/ Multiple pregnancy babies have a much higher risk of being born prematurely and therefore LBW or VLBW. However in Puerto Rico approximately 98% of the 2006 births were singleton and 11.9% were LBW. As far as preliminary 2007 data, 98% of the births were singleton and 11.2% of them were LBW.*

*Since the year 2000 (9.7%) to 2006 (11.9%) the singleton LBW rates have increased about 23%. Preliminary 2007 birth data reports a slight decrease of 6%, but this could change once we have the final data, therefore we will wait until the Vital Statistics database has been revised and information is made official before drawing conclusions based on this evidence. As expected, rates are lower for singletons than for multiple births (11% vs. 72%).*

*In Puerto Rico the disorders related to length of gestation and fetal growth are the first causes of Infant Mortality (IM). Decreasing the rate of LBW, VLBW and premature births will decrease the IM rate. The MCH Program educates women during their pregnancy with a prenatal curriculum such as the "Comenzando Bien", developed by the March of Dimes. It is offered to pregnant women throughout the island by specially trained and certified facilitators. It includes information on the signs and symptoms of a premature delivery. The MCH Program began to design a new Prenatal Course similar to the one offered by the March of Dimes. This Prenatal Course will focus on the special needs of the participants. It is composed of 4 sections that cover prenatal care, healthy eating habits, physical activity, orientation of labor and delivery, breastfeeding, newborn care, family planning, among others.*

*As mentioned on HIS 1A the MCH Program is also collaborating with the Puerto Rico March of Dimes Prematurity Taskforce in the design of a campaign aimed at reducing the*

*late preterm births.*

***Efforts of the MCH Program continue through HVP program, Healthy Start and the WIC program with the objective of providing the pregnant women with the necessary tools for a healthy pregnancy.//2010//***

**Health Status Indicators 02A:** *The percent of live births weighing less than 1,500 grams.*

Health Status Indicators Forms for HSI 01 through 05 - Multi-Year Data

<b>Annual Objective and Performance Data</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
Annual Indicator	1.5	1.5	1.5	1.4	1.5
Numerator	762	736	729	652	686
Denominator	51223	50687	48744	46719	45569
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Provisional	Provisional

**Notes - 2008**

Updated data for 2007. Data for 2008 provided by the Office of Informatics and Technology Advances (OITA) of the Department of Health.

**Notes - 2007**

Updated data for 2007. For source of information refer to 2006 notes.

**Notes - 2006**

Numerator and Denominator: data provided by the Vital Statistics Office.

**Narrative:**

***//2010/ For the last nine years the VLBW rates have remain the same with 1.4% from 2000 to 2007. The primary cause of very low birth weight (VLBW) is premature. VLBW babies are often born before 30 weeks of pregnancy. Preliminary 2007 birth data from the Vital Statistics reports that 93% of the VLBW infants were in fact premature. Although this is preliminary data, this tendency had remained in the past few years.***

***As mention in the HSI's 1A and 1B, efforts to improve these indicators are conducted by the MCH Program. Through the HVP, the MCH Program provides case management / care coordination, health education and counseling to pregnant women with complex medical and social risk factors associated with LBW and VLBW infants. The CHW educate pregnant women on the signs and symptoms of preterm delivery, the importance of early prenatal care, nutrition during pregnancy, oral health, among other educative activities aimed at improving pregnancy outcomes.***

***A preconceptive health pilot project that will target to diabetic women in reproductive age, particularly those in the interconceptional age, is being developed by the MCH Program. They will receive a series of educational interventions in the areas of diabetes control, nutrition, physical activity and women's health. The goal is to make them aware of the importance of controlling their diabetes during the preconceptional period in order to improve the outcomes of future pregnancies. The preconceptive health project will begin***



*in two WIC clinics on the western side of the Island this fall. Once the project is fully evaluated the Committee will determine if it should be modified and/or expanded to other areas.*

*Also in collaboration with March of Dimes, a massive campaign aimed at women of reproductive age will be design during this year with the objective of decreasing the rate of late preterm births. The PNC Card, the prenatal curriculum and the collaboration with others programs such as WIC, are some of the efforts that the MCH Program is conducting to reduce LBW, VLBW and preterm births in Puerto Rico.//2010//*

**Health Status Indicators 02B:** *The percent of live singleton births weighing less than 1,500 grams.*

Health Status Indicators Forms for HSI 01 through 05 - Multi-Year Data

<b>Annual Objective and Performance Data</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
Annual Indicator	1.2	1.2	1.2	1.2	1.2
Numerator	625	632	593	551	537
Denominator	51223	50687	47791	45793	44605
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Provisional	Provisional

**Notes - 2008**

Updated data for 2007. Data for 2008 provided by the Office of Informatics and Technology Advances (OITA) of the Department of Health.

**Notes - 2007**

Updated data for 2007. For source of information refer to 2006 notes.

**Notes - 2006**

Numerator and Denominator: data provided by the Vital Statistics Office.

**Narrative:**

*//2010/ According to preliminary 2007 Vital Statistic data, the rate of VLBW in singleton is 1.2%. This rate has remained constant in the last few years. As observed before the rate of VLBW infants is lower in singleton (1.2%) than in multiple births (15%).*

*Efforts of the MCH Program to decrease VLBW rates are the same aimed at reducing LBW and premature births. Through the HVP, the MCH Program provides case management/care coordination, health education and counseling to pregnant women with complex medical and social risk factors associated with LBW and VLBW infants. The PNC Card, the prenatal curriculum and the collaboration with others programs such as WIC, are some of the efforts that the MCH Program is conducting to reduce LBW, VLBW and preterm births in Puerto Rico.//2010//*

**Health Status Indicators 03A:** *The death rate per 100,000 due to unintentional injuries among children aged 14 years and younger.*

Health Status Indicators Forms for HSI 01 through 05 - Multi-Year Data

Annual Objective and Performance Data	2004	2005	2006	2007	2008
Annual Indicator	3.7	2.3	2.6	2.3	2.7
Numerator	32	20	22	19	22
Denominator	865067	852745	839172	821286	806246
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Provisional	Provisional

**Notes - 2008**

Updated data for 2007.

2008 Numerator: Data obtained from the Office of Informatics and Technology Advances (OITA) of the Department of Health.

2008 Denominator: Population estimates of the US Census.

**Notes - 2007**

Updated data for 2007. For source of information refer to 2006 notes.

**Notes - 2006**

Numerator: Obtained from birth data files provided by the Office of System Development.

Denominator: Annual Estimates of the Population by Age and Sex for Puerto Rico: April 1, 2000 to July 1, 2006

**Narrative:**

*/2010/ Unintentional injuries are the number one cause of death among children aged 14 years or younger in Puerto Rico. The MCH Division monitors these deaths regularly using data from the PRDoH VS Report. In 2000 the rate of unintentional injuries related deaths was 5.4/100,000. Since then it has declined to a level of 2.3/100,000 in 2005. According to these official reports, PR has experienced a 57% reduction in the death rate due to unintentional injuries during this period. Preliminary data VS for 2006 and 2007 revealed a slight increase in the rates. In 2006 preliminary VS data revealed 21 children 14 years of age and younger died due to unintentional injuries (2.5 per 100,000) compared to 20 in 2007 (2.4 per 100,000). In 2008, very preliminary VS data report 16 deaths in children 14 years of age or younger due to unintentional injuries.*

*Of the 20 unintentional injuries related fatalities reported in 2007, 50% of them were associated with motor vehicles collisions in all age groups except infants. The other causes of unintentional injury related deaths varied according to the person's age and the developmental stage. During 2007 the second cause of unintentional injuries related death among those in the 1-4 year old group was drowning and for those in the 5-9 years of age subgroup were falls and drowning. Among those 10-14 year olds who died of unintentional injuries, falls and electrocution were the second most common cause. The only infant that died did so due to suffocation.*

*In 2007 the MCH Division analyzed the unintentional injury related deaths using 2001-2005 VS reports. Although no seasonal pattern was detected when all causes were evaluated together, once specific injuries were considered a seasonal pattern became evident. Pedestrian fatalities were more frequent in February and MVC occupants' deaths were more common in May. Deaths due to drowning increased towards the end of March and April and again during the months of June and July. Fall related deaths followed this same pattern. Fire related deaths occurred more frequently during the month of May.*

*Reducing unintentional injuries among the pediatric population is one of our top 10 priorities. Several public and private entities in PR share the responsibility of working to reduce unintentional injury related deaths. Most of the activities are centered on educational events. Key collaborators are the Police, Education and Fire Departments, the HSC, SKC, PCC and the EMSC.*

*The MCH staff provided a total of 685 educational interventions on the topic of unintentional injury prevention. A total of 8,311 persons benefited from them. Additional topics covered by our staff that are pertinent to this issue are: first aid, how to prepare for hurricane season, establishing a family plan for disasters, selection of a safe toy and SIDS. These represent an additional 390 injury related prevention activities that reached 4,588 persons.//2010//*

**Health Status Indicators 03B:** *The death rate per 100,000 for unintentional injuries among children aged 14 years and younger due to motor vehicle crashes.*

Health Status Indicators Forms for HSI 01 through 05 - Multi-Year Data

<b>Annual Objective and Performance Data</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
Annual Indicator	0.8	1.3	1.2	1.1	1.6
Numerator	7	11	10	9	13
Denominator	865067	852745	839172	821286	806246
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Provisional	Provisional

**Notes - 2008**

Updated data for 2006 and 2007.

2008 Numerator: Data obtained from the Office of Informatics and Technology Advances (OITA) of the Department of Health.

2008 Denominator: Population estimates of the US Census.

**Notes - 2007**

Updated data for 2007. For source of information refer to 2006 notes.

**Notes - 2006**

Numerator: Obtained from birth data files provided by the Office of System Development.  
Denominator: Annual Estimates of the Population by Age and Sex for Puerto Rico: April 1, 2000 to July 1, 2006

**Narrative:**

*/2010/ For the past decade our vital statistics reports have had unintentional injuries as the principal cause of death for children 1-14. Most of them were the result of MVC. In 2008, preliminary VS reports reveal 10 deaths due to MVC in this age group. Among the 10 dead, six were males and 4 females. Three were less than four years of age; five were between the ages of 5-9 and two between 10-14 years of age. Seven were passengers and 3 pedestrians. During FY 2007-08, the Automobile Accident Compensation Administration (ACAA) data reported 9 deaths and 4,143 injuries related to MVC among children 0 to 14 years. The PR Highway Safety Commission recorded 14 deaths due to MVC in 2008. Their report includes 8 deaths among those less than 5 years of age. One child was in the 5 to 9 year old category and 5 were in the 10-14 years of age range. According to their statistics half of these deaths occurred in pedestrians between the ages of 0-15.*

*According to the PR HSC the majority of MCV fatalities are due to excessive velocity, driving under the influence of drugs or alcohol, pedestrians and cyclist walking or riding in restricted areas, aggressive or negligent driving and lack of knowledge of highway safety rules.*

*For additional information regarding this HSI please refer to NPM 10./2010//*

**Health Status Indicators 03C:** *The death rate per 100,000 from unintentional injuries due to motor vehicle crashes among youth aged 15 through 24 years.*

Health Status Indicators Forms for HSI 01 through 05 - Multi-Year Data

<b>Annual Objective and Performance Data</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
Annual Indicator	18.1	21.7	21.0	23.2	15.2
Numerator	108	128	123	134	87
Denominator	595850	590940	586613	577715	574099
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Provisional	Provisional

**Notes - 2008**

Updated data for 2006 and 2007.

2008 Numerator: Data obtained from the Office of Informatics and Technology Advances (OITA) of the Department of Health.

2008 Denominator: Population estimates of the US Census.

**Notes - 2007**

Numerator: Obtained from birth data files provided by the Office of Informatics and Technology Advances, (OITA).

Denominator: Annual Estimates of the Population by Age and Sex for Puerto Rico: April 1, 2000 to July 1, 2007

#### **Notes - 2006**

Numerator: Obtained from birth data files provided by the Office of Informatics and Technology Advances, (OITA).

Denominator: Annual Estimates of the Population by Age and Sex for Puerto Rico: April 1, 2000 to July 1, 2006

#### **Narrative:**

*/2010/ According to official VS data in 2005 a total of 128 adolescents and young adults aged 15-24 died due to MVC. This number represents an increase from the 108 deaths reported in 2004. In 2006 preliminary VS data reveal a total of 120 adolescents and young adults aged 15-24 died due to MVC. This represents a death rate of 20.5/100,000. Preliminary data for 2007 reports 138 deaths in this age group (23.8/100,000). Very preliminary VS for 2008 report 61 deaths. ACAA's dataset for 2008 includes 81 fatalities in this category (14.1/100,000).*

*The Puerto Rico Highway Safety Commission provides information regarding fatalities due to MVC. In 2008 they reported one out of every five (21.3%) fatalities due to MVC occurred in adolescents and young adults between the ages of 15-24. Two thirds (68) of those involved were conductors, 8 pedestrians, one was a pedacyclist and 25 were riding a motorcycle.*

*The Office of Epidemiology of the PR Department of Health has established the infrastructure needed to establish an injury surveillance system. This surveillance system will gather information provided by the Forensics Institute and the PR Police Department. They will focus initially on Homicides, Suicides and MVC fatalities. We expect the information provided by this Surveillance System will provide us specific information regarding pediatric age MVC fatalities. Such data will be used to guide our action plans and to document the need for additional regulatory and legislative measures. Being able to monitor trend data associated with this indicator will help us evaluate the impact the prevention strategies that have been implemented have had. The information gathered will be shared with our collaborators so that it may be used during press conferences, trainings and educational activities directed at raising awareness of the problem.*

*The PR NHSTA data for 2005 show that driving while under the influence of drugs or alcohol is more common among adolescents and young adults particularly during the weekend. Efforts to increase the legal age for alcohol consumption to 21 in PR have failed so far; nevertheless, we will continue to support its approval. A Zero Tolerance Law for those under 18 was passed in 2004. Efforts continue to expand it to include other age groups.*

*To reduce these deaths the PR Highway Safety Plan has established several strategies. Among them are: increasing the legal age for alcohol consumption to 21, educational interventions directed at university and high school students, mass media campaigns, strict police enforcement of current laws, conducting traffic engineering projects to increase road safety among others. Recently laws were enacted to reduce fatalities among motorcycle riders. They include: increasing to 18 the required age to drive a motorcycle, requiring taking and passing a practical exam prior to obtaining the license, establishing a dress code and requiring the use of a DOT certified helmet.//2010//*

**Health Status Indicators 04A:** *The rate per 100,000 of all nonfatal injuries among children aged 14 years and younger.*

Health Status Indicators Forms for HSI 01 through 05 - Multi-Year Data

<b>Annual Objective and Performance Data</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
Annual Indicator	539.6	548.1	606.0	584.0	684.8
Numerator	4668	4668	5085	4821	5521
Denominator	865067	851730	839172	825576	806246
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Final	Provisional

**Notes - 2008**

Numerator 2008: Provided by the Health Insurance Commissioner and ACAA.

Denominator 2008: Population Estimates of the US Census.

**Notes - 2007**

Updated data for 2007. For source of information refer to 2006 notes.

**Notes - 2006**

Numerator: Provided by the Health Insurance Commissioner for 2006.

Denominator: Annual Estimates of the Population by Age and Sex for Puerto Rico: April 1, 2000 to July 1, 2006

**Narrative:**

*/2010/ PR does not collect data from Emergency Room visits to monitor this HSI. Available data is provided by the Insurance Commissioner based on claims reports provided by the Health Insurance Companies. Their latest report states 449 children 14 years of age or younger presented claims due to hospitalizations related to nonfatal unintentional injuries in 2007. The MCH Division nevertheless gathers information from other sources such as the PR Poison Control Center. Their 2008 report included information regarding type, intentionality and lethality of the exposure. According to them 3,105 (35%) of the calls received by the PCC were related to exposures to potentially toxic substances in children 6 years of age and under. Among the substances to which this group was most frequently exposed were: cleaning products, analgesics, insecticides, cough preparations and silica gel. No poison related deaths were reported in this age group.*

*During BY 2007-2008, 685 educational activities directed at preventing unintentional injuries were offered by MCH staff. A total of 8,311 persons attended them. In addition 3,105 persons received SIDS prevention messages. Seven educational activities were provided to help 185 persons become prepared for the hurricane season. Another topic usually covered during the Christmas season by the MCH and EMSC staff is Toy Safety. Last year 1,298 persons received this information.*

*MCH Division staff members are actively involved with the EMSC Advisory Committee efforts to organize local emergency response efforts to insure those services injured children need are locally available, well coordinated, adequate and appropriate for their particular age group and follow the latest expert panel recommendations. Currently, the*

**Committee is working on:** categorizing hospital emergency rooms based on the level of services they are able to provide, reviewing and updating off line protocols for pre hospital management of pediatric emergencies according to the latest expert recommendations and guidelines; establishing policies directed at insuring emergency response vehicles have the pediatric equipment needed to adequately respond to pediatric emergencies; developing a standard inter hospital referral format and protocol; establishing a coordinated referral pattern and promoting the official establishment of an expert committee to oversee, organize and coordinate the entire local emergency response system. In May 2008 the EMSC project sponsored a Symposium entitled "Pediatric Care during a Disaster". During this activity a group of 175 health care professionals from hospitals that do not regularly treat pediatric patients received information on the appropriate management of pediatric emergencies and the equipment needed to treat them. The symposium included didactic as well as hands on practice sessions. PR EMSC certified 75 persons in Pediatric Advanced Life Support and 56 persons in Advanced Trauma Life Support.//2010//

**Health Status Indicators 04B:** The rate per 100,000 of nonfatal injuries due to motor vehicle crashes among children aged 14 years and younger.

Health Status Indicators Forms for HSI 01 through 05 - Multi-Year Data

Annual Objective and Performance Data	2004	2005	2006	2007	2008
Annual Indicator	582.5	306.8	590.8	561.1	513.9
Numerator	5039	2654	4958	4632	4143
Denominator	865067	865067	839172	825576	806246
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Final	Provisional

**Notes - 2008**

Updated data for Fiscal Year 2007-2008.

2008 Numerator: Data provided by the Administration for Compensation for Car Collision.

2008 Denominator: Population estimates of the US Census.

**Notes - 2007**

Updated data for 2007. For source of information refer to 2006 notes.

**Notes - 2006**

Numerator: Provided by the Administration for Compensation for Car Collision for FY 2005-2006.  
Denominator: Annual Estimates of the Population by Age and Sex for Puerto Rico: April 1, 2000 to July 1, 2006

**Narrative:**

/2010/ As expected, nonfatal injuries associated with MVC are more frequent than the fatalities. The Insurance Commissioners Office reported a total of 11,881 children with claims due to nonfatal injuries among children 14 years of age and younger. Data for 2008 provided by the Automobile Accident Compensation Administration (ACAA) reported

**4,143 non fatal MVC injuries among children aged 14 years or younger which represents a rate of 561.1/100,000 nonfatal injuries in the 14 or younger age group. This represents a decrease from the 2006 reported rate of 590.8/100,000.**

**The majority of those injured (39.6%) were between 10-14 years of age followed by those in the 5-9 years of age subgroup (32.9%). Differences among the sexes were very small. During this period injuries were more frequent (50.8%) among females than among males (49.2%). Twenty-three (23) of those injured were children 10-14 years of age who were drivers at the time the collision occurred. Eighteen of these drivers were males. Over sixteen percent (16.7%) of those injured were pedestrians.**

**In order to monitor trends, identify contributing factors associated with unintentional MVC injuries, and evaluate the impact implemented strategies have had on the reduction of these injuries, the PR State Epidemiologist Office has established a Surveillance System. This surveillance system will gather information on MCV associated fatalities, homicides and suicides. The MCH Division Pediatric Epidemiologist will help analyze the pediatric deaths recorded in the surveillance system.**

**Two hundred and seventy seven (277) educational activities were offered by MCH staff to promote the use of car seats. A total of 2,511 persons participated in them. In addition, 564 persons attended 64 activities during which seat belt use was promoted.**

**In an effort to reduce MVC related deaths among pedestrians, cyclist and conductors in this age group the PR Department of Transportation and the HSC in collaboration with the NHTSA have established an educational/recreational park whose main goal is to teach 7-10 years the theoretical and practical implications of the PR Traffic Law and other traffic safety measures.**

**Puerto Rico has one of the highest safety belt usage rates in the nation (92.7%). Child restraint usage, however, lags behind at 86%. Commonwealth and municipal police agencies monitor compliance with the mandatory usage law during national mobilizations and during routine traffic related stops. Another strategy implemented to reduce these deaths has been strengthening the permanent child restraint fitting stations established by law in Puerto Rico's firehouses. This will help increase use of child restraints.//2010//**

**Health Status Indicators 04C:** *The rate per 100,000 of nonfatal injuries due to motor vehicle crashes among youth aged 15 through 24 years.*

Health Status Indicators Forms for HSI 01 through 05 - Multi-Year Data

<b>Annual Objective and Performance Data</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
Annual Indicator	2,105.9	1,754.8	2,250.0	1,895.3	1,753.5
Numerator	12548	10456	13199	11042	10067
Denominator	595850	595850	586613	582611	574099
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Final	Provisional

**Notes - 2008**



Updated data for Fiscal Year 2007-2008.

2008 Numerator: Data provided by the Administration for Compensation for Car Collision.

2008 Denominator: Population estimates of the US Census.

#### **Notes - 2007**

Updated data for 2007. For source of information refer to 2006 notes.

#### **Notes - 2006**

Numerator: Provided by the Administration for Compensation for Car Collision for FY 2005-2006.

Denominator: Annual Estimates of the Population by Age and Sex for Puerto Rico: April 1, 2000 to July 1, 2006

#### **Narrative:**

*/2010/ Data for BY 2007-08 from the Automobile Accident Compensation Administration (ACAA) revealed 10,077 non fatal MVC among youth 15-24 years of age, which corresponds to a rate of 1,755.3/100,000 nonfatal injuries for those in the 15-24 age range. This represents a decrease from the 2006 rate of 2,250.0/100,000. The majority of those injured (57.3%) were between 20-24 years of age. Differences among sexes were small. Injuries predominated among males (53%). The recent popularity for motorcycles has been associated with the increase in MVC injuries related to their use. Males were more frequently involved in motorcycle related injuries.*

*The number of young drivers (16-25) involved in fatal crashes is high. Male drivers accounted for 93% of the MCV fatalities in this age group. During the period of 2002-2006, an average of 40% of young drivers that died tested positive for alcohol. Thirty-two percent of them were legally impaired.*

*Driving While Intoxicated continues to be the number one cause of fatal crashes in Puerto Rico and its rate is among the highest in the nation. Puerto Rico's alcohol related fatality rate has been twice the national average even though our rate of improvement is significantly greater than the national average. Several bills have been passed to strengthen the DWI statutes. Among them are: zero tolerance law for under 18 became law, open container law, repeat offender law that provides for vehicle confiscation and mandatory jail of 48 hours and a mandatory forty-eight hours of jail sentence for intoxicated drivers with a minor under 15 years of age in the car. In addition, no DWI suspect can refuse to give a BAC sample.*

*To reduce alcohol related fatalities and morbidity officials are trying to pass laws such as Age 21 MDA and Zero Tolerance. Other strategies being used are Special Alcohol Units on weekend, nighttime patrols and sobriety checkpoints, participation in the national crackdowns, and finally, High Visibility Enforcement activities during the Christmas, summer season and Labor Day periods.*

*The PRHTSC has developed various youth awareness programs, most notably the FIESTA program. This program attempts to reach youth using their peers to promote traffic safety messages and alcohol abstinence among potential motor vehicle conductors. This program has been well received by students, teachers and school administrators and has continued to grow.*

*A recent motorcycle safety passed law became effective on October 9, 2009, which key elements strengthen the roadway, licensing and protective gear requirements of the current primary helmet law. Since the passing of these laws, motorcycle deaths have decreased from 83 in 2007 to 78 in 2008. Ten of these deaths were in youngsters between*

***the ages of 15-20 and 15 in young adults between the ages of 21-24. All of these fatalities except one occurred in males.//2010//***

**Health Status Indicators 05A:** *The rate per 1,000 women aged 15 through 19 years with a reported case of chlamydia.*

Health Status Indicators Forms for HSI 01 through 05 - Multi-Year Data

<b>Annual Objective and Performance Data</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
Annual Indicator	6.7	6.9	8.5	14.3	12.3
Numerator	988	1015	1243	2078	1806
Denominator	147423	146448	145916	145661	146378
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Final	Provisional

**Notes - 2008**

2008 Numerator: Data provided by the STD/HIV Surveillance System, PR Department of Health.

2008 Denominator: Population estimates of the US Census.

**Notes - 2007**

Updated data for 2007. For source of information refer to 2006 notes.

**Notes - 2006**

Numerator: Provided by the STD/HIV Surveillance System, Department of Health.

Denominator: Annual Estimates of the Population by Age and Sex for Puerto Rico: April 1, 2000 to July 1, 2006

**Narrative:**

***/2010/ Chlamydia is the most common bacterial STD disease and the most common reported in the United States. It is also the most widespread STD reported amid adolescents in Puerto Rico. Being primarily an asymptomatic disease, it poses health risks for those who contract it if left untreated, such as PID in women and infertility in both males and females. Infected pregnant women are in danger of delivering a baby with birth defects.***

***In 2008, the STDs Surveillance Office reported 6,883 new cases of Chlamydia in the Island. Of these, 1,955 occurred in both sexes in the 15-19 year old range. Females in this age group represented 92.4% (1,806) of the cases, for a rate of 12.3 rate per 1,000 women aged 15-19. A 14.0% decrease was observed in the number of new cases in females in this age category when compared to those reported for 2007 (14.3/1,000). The consistent emphasis on prevention of infection with Chlamydia through education and screening opportunities aimed at this population group may explain the gradual reduction in new cases observed during this past year when compared to 2007.***

***Awareness messages on how to prevent Chlamydia infection as well as access to preventive health care services, such as routine Chlamydia screening, may contribute to detect asymptomatic infection, and to reduce its prevalence as well as its associated***

*outcomes. The MCH Division will continue providing educational opportunities to Home Visiting Nurses in all aspects related to infection with Chlamydia and prevention strategies to increase their knowledge on the subject. They in turn will educate participants of the Program. Adolescent females will be particularly targeted with one-on-one orientation, and referrals for screening and treatment if needed. The Pediatric Preventive Health Guide recommends Chlamydia screening for adolescents in the 15-17 year old range. Besides, the STD Program will continue offering orientation to adolescents in the school scenarios and free urine test screening for Chlamydia, a strategy initiated by the program several years ago. Through this approach, the STD/HIV Prevention Program and the MCH Division expect that more adolescents will accept being screened, and more cases will be detected and referred for adequate and prompt treatment. The Adolescent Health Program (SISA, Spanish acronym), part of the MCH Division, will also target this population with educational material aimed at preventing infection with this disease. Also, the PR Birth Defects Surveillance System will disseminate a brochure they developed addressed to women of reproductive age to educate them on the risks of being infected with Chlamydia and the urgency of treatment prior to pregnancy to avoid having a child with birth defects.//2010//*

**Health Status Indicators 05B:** *The rate per 1,000 women aged 20 through 44 years with a reported case of chlamydia.*

Health Status Indicators Forms for HSI 01 through 05 - Multi-Year Data

<b>Annual Objective and Performance Data</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
Annual Indicator	3.1	3.2	4.0	6.6	5.9
Numerator	2191	2288	2807	4651	4109
Denominator	706402	705472	703727	701558	696588
Check this box if you cannot report the numerator because 1. There are fewer than 5 events over the last year, and 2. The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Final	Provisional

**Notes - 2008**

Updated data for 2006 and 2007.

2008 Numerator: Data provided by the STD/HIV Surveillance System, PR Department of Health.

2008 Denominator: Population estimates of the US Census.

**Notes - 2007**

Updated data for 2007. For source of information refer to 2006 notes.

**Notes - 2006**

Numerator: Provided by the STD/HIV Surveillance System, Department of Health.

Denominator: Annual Estimates of the Population by Age and Sex for Puerto Rico: April 1, 2000 to July 1, 2006

**Narrative:**

*//2010/ In 2008, the STD Surveillance Office reported 4,109 cases for the females in the 20-44 age group. The rate for this age range was 5.9/1,000; a 10.6% decrease was observed*

*when comparing data from that of 2007, when the rate in this category was 6.6/1,000. The consistent educational and screening activities at community and target population groups may explain the reduction in cases of infection with Chlamydia. As mentioned in HSI 05A, the MCH staff has continued raising awareness on the importance of preventing infection with Chlamydia through individual orientations and learning events aimed at participants of the different programs, such as the HVP, and at community level. Likewise, the PRDoH STD/HIV Prevention Program will continue providing educational activities in the community and for health providers as a tool to raise their awareness and compromise to educate and carry out routine Chlamydia screening among their patients, particularly females, to reduce the infection's prevalence and related health complications. The PR Birth Defects Surveillance System will disseminate a brochure aimed at women of reproductive age to raise their awareness on the risks of being infected with Chlamydia and the need for prompt and adequate treatment prior to pregnancy to avoid delivering a child with birth defects associated to the infection.//2010//*

**Health Status Indicators 06A:** *Infants and children aged 0 through 24 years enumerated by sub-populations of age group and race. (Demographics)*

HSI #06A - Demographics (TOTAL POPULATION)

<b>CATEGORY</b> TOTAL POPULATION BY RACE	<b>Total All Races</b>	<b>White</b>	<b>Black or African American</b>	<b>American Indian or Native Alaskan</b>	<b>Asian</b>	<b>Native Hawaiian or Other Pacific Islander</b>	<b>More than one race reported</b>	<b>Other and Unknown</b>
Infants 0 to 1	47421	0	0	0	0	0	0	47421
Children 1 through 4	194437	0	0	0	0	0	0	194437
Children 5 through 9	267849	0	0	0	0	0	0	267849
Children 10 through 14	296539	0	0	0	0	0	0	296539
Children 15 through 19	298181	0	0	0	0	0	0	298181
Children 20 through 24	275918	0	0	0	0	0	0	275918
Children 0 through 24	1380345	0	0	0	0	0	0	1380345

**Notes - 2010**

**Narrative:**

*/2010/ In 2000 Census, 1,520,995 children and adolescents aged 0-24 yrs lived in PR. This figure represents 40% of the overall population of PR. The 2007 PR Community Survey (PRCS) estimated that 36% (1,403,903) of the total population in PR were children and adolescents up to 0-24 years old. This estimate represents a 10% reduction when compared to 2000. The major decline in population occurred in the following age groups: 0-4yrs (17%); 5-9 yrs (11%); and 20-24 yrs (6%) for 2007.*

*The major racial groups in PR are white and black. Nearly 86% of people in PR classified their race as white, while 8% reported their race as black, according to the 2000 Census. In the 0-24 yrs old group (1.5 million of the total population), 80% were white, and 8% were black. According to the 2007 PRCS, 1.4 million were children up to 24 yrs old. Of these, 76% were white and 6% were black. The remaining children were reported as other races.*

*However, we are certain that the information under the race category reported in the Census in PR is biased for two main reasons. First, the question does not include other racial categories used by Puerto Ricans. Second, there is a social stigma attached to being black among Puerto Ricans. Nevertheless, in PR there is not a significant disparity in race.*

*Comparing 2000 and 2007, the size of the child and adolescent group declined 7.7%. The natural growth in PR continues to decrease as a consequence of the declining natality rates over the last decade. The migration of Puerto Ricans to the US mainland and the fact that women in childbearing age are postponing motherhood also contribute to this situation. A long-term decline in fecundity rates has been observed in PR. Preliminary data for 2007 suggest that the fecundity rate has fallen to 1.7 births per woman.*

*According to the 2008 Census Population Estimates, the 0 to 24 yrs old population was 35% (1,380,345), which indicates that it has been declining. For the 2008, the migration from PR to US mainland continues, mainly as a consequence of the economic recession. It is expected that the rate of migration will increase in the incoming months due to the local government's decision to lay off approximately 30,000 government employees as a measure to overcome the Island's financial deficit.*

*A challenge faced by the MCH program is the need for family planning services for GIP beneficiaries and the uninsured. Appropriate access to contraceptive methods and education regarding pre and interconceptional care contributes to optimal socioeconomic and health conditions for the family. GIP does not cover contraceptive methods. The MCH Program, depending on the availability of funds, provides them to a limited number of beneficiaries. MCH staff also disseminates information about the Program's services, and refers clients to other needed services, such as WIC. These actions aim to minimize disparities between the medically indigent and other populations.//2010//*

**Health Status Indicators 06B:** *Infants and children aged 0 through 24 years enumerated by sub-populations of age group and Hispanic ethnicity. (Demographics)*

HSI #06B - Demographics (TOTAL POPULATION)

<b>CATEGORY</b> TOTAL POPULATION BY HISPANIC ETHNICITY	<b>Total NOT Hispanic or Latino</b>	<b>Total Hispanic or Latino</b>	<b>Ethnicity Not Reported</b>
Infants 0 to 1	0	47421	0
Children 1 through 4	0	194437	0
Children 5 through 9	0	267849	0
Children 10 through 14	0	296539	0
Children 15 through 19	0	298181	0
Children 20 through 24	0	275918	0
Children 0 through 24	0	1380345	0

#### Notes - 2010

##### Narrative:

*/2010/ Puerto Rico has been a territory of the United States since the end of the Spanish-American War (1898), and became a Commonwealth in 1952. Spanish is the official language of the Commonwealth of Puerto Rico. The vast majority of the ethnic population is Puerto Rican, while the most significant foreign ethnic groups are Dominicans and Cubans. These groups have a Hispanic background. The 2000 Census revealed the*

*following ethnic composition in PR: 95.1% Puerto Ricans, 0.5% Cubans, 0.3% Mexican and 2.8% other Hispanic or Latino. Only 0.2% was Asian, Native Hawaiian and other Pacific Islander. According to the 2007 PR Community Survey, the major ethnic groups living in the Island are Puerto Ricans (98.7%), Dominicans (1.7%) and Cubans (0.5%).*

*Similar findings are observed for age subgroups. The vast majority of the 0-24 year old population was Hispanic (99%) and spoke Spanish (95%) according to the 2000 Census and the 2007 PR Community Survey. There are no changes in the ethnic groups categories when compared by age subgroups.*

*As mentioned above, the Dominicans are the major foreign ethnic groups in PR and one of the most disadvantaged groups. They are concentrated mainly in the Greater Metropolitan Area close to San Juan, the capital city. Two categories of Dominicans live in PR: legal and undocumented residents. Low income Dominicans who are legal residents but have less than 5 years living on the Island, are not eligible for the Government Insurance Plan. If they cannot afford a Private Medical Plan, they run the same problem as the undocumented population: they have to either pay cash for health services, or, quite often, they do not seek care at all. However, they (including young population 0-24 years old) do receive emergency care services.*

*To overcome this situation, the MCH Program, through the Home Visiting Program (HVP), offers education and support to Dominican women regardless of immigration status. Most of the time, these women are enrolled in the HVP via referral from the CHW. The most significant challenge faced by the HVP Nurses is helping Dominican pregnant women receive prenatal care services through willing providers at low or no cost.*

*The MCH Program also provides services to this special population through the following programs, among others: a) orientation by the Perinatal Nurses while the woman is in the hospital and; b) activities developed by the Youth Health Promoters of the Comprehensive Adolescent Health (SISA Program) through positive youth development initiatives to raise awareness among their school peers - including Dominicans - of health-related issues.//2010//*

**Health Status Indicators 07A:** *Live births to women (of all ages) enumerated by maternal age and race. (Demographics)*

HSI #07A - Demographics (Total live births)

<b>CATEGORY</b> Total live births	<b>Total All Races</b>	White	Black or African American	American Indian or Native Alaskan	Asian	Native Hawaiian or Other Pacific Islander	More than one race reported	Other and Unknown
Women < 15	146	0	0	0	0	0	0	146
Women 15 through 17	2995	0	0	0	0	0	0	2995
Women 18 through 19	4975	0	0	0	0	0	0	4975
Women 20 through 34	33649	0	0	0	0	0	0	33649
Women 35 or older	3787	0	0	0	0	0	0	3787
Women of all ages	45552	0	0	0	0	0	0	45552

## Notes - 2010

### Narrative:

*/2010/ The occurrence of many diseases, injuries, and other public health problems varies across different age groups and some are disproportionately higher in racial/ethnic minority populations in the United States. The collection of information by age groups and by race and ethnicity has been an important component of public health surveillance efforts used to identify differences in health status among different groups.*

*The 2000 Census was the first census in Puerto Rico since 1950 to include questions about race or ethnicity. For people in Puerto Rico, as well as Hispanics/Latinos living in the United States, race is a subjective concept. This is evident in a comparison of race responses between people living in Puerto Rico and Puerto Ricans living in the United States. Although the groups share the same heritage, they have very different ideas about racial identity. About 81% of people in Puerto Rico identified themselves as white in the 2000 Census, but Puerto Ricans residing in the United States were almost equally likely to say they were white (46%) as "some other race" (47%). Data in the 2005-2007 Puerto Rico Community Survey Census shows that about 79.6% of people in PR identified themselves as white, whereas 7.7% identified themselves as blacks. Preliminary 2008 Vital Statistics data reports that from the 46,607 births of mothers residents of Puerto Rico, 89.5% identified themselves as white in the birth certificate and 10.5% as blacks.*

*Preliminary Vital Statistics data of 2007 reveals that the birth rate for teens 18 to 19 years of age to be 88.2 per 1,000, 15 to 17 years of age to be 36.4 per 1,000 and 1.1 per 1,000 for teens in the 10 to 14 age group. Women 35 years or older had a birth rate of 7/1,000.*

*Efforts to reduce teen pregnancies are made by the MCH Program through to special projects that work directly with adolescents. The Puerto Rico Abstinence Education Program (PRAEP) is also housed under the MCH Program and the Auxiliary Secretariat of Family Health, Integrated Services and Health Promotion. This program sponsors activities directed at reducing pregnancies in adolescents by promoting sexual abstinence until marriage as a healthy lifestyle. PRAEP has offered training to teachers and community members that facilitate project initiatives in public and private schools and special communities. In addition, the Comprehensive Adolescent Health Program (SISA, Spanish acronym) integrates all activities directed at reducing adolescent risk factors: pregnancy, unintentional injuries, violence, alcohol and drug use, etc. SISA trains middle school students as peer health promoters and organizes various activities to support them in their work.*

*The MCH Community Health Workers also distribute educational material and offer group activities on the subject of sexual abstinence, how to keep your boyfriend/girlfriend and say no, peer pressure, interpersonal relations, among others, to adolescents across the Island.//2010//*

**Health Status Indicators 07B:** *Live births to women (of all ages) enumerated by maternal age and Hispanic ethnicity. (Demographics)*

HSI #07B - Demographics (Total live births)

<b>CATEGORY</b>	<b>Total NOT Hispanic or Latino</b>	<b>Total Hispanic or Latino</b>	<b>Ethnicity Not Reported</b>
Total live births			
Women < 15	0	146	0
Women 15 through 17	0	2995	0

Women 18 through 19	0	4975	0
Women 20 through 34	0	33649	0
Women 35 or older	0	3787	0
Women of all ages	0	45552	0

#### Notes - 2010

##### Narrative:

*/2010/ The 2000 Census revealed the following ethnic composition in PR: 95.1% Puerto Ricans, 0.5% Cubans, 0.3% Mexican and 2.8% other Hispanic or Latino. Only 0.2% was classified as Asian, Native Hawaiian and other Pacific Islander. In 2004, almost 90% of the births were among Hispanic/Latino women, the majority Puerto Ricans.*

*The 2005-2007 Puerto Rico Community survey revealed the following ethnic compositions in PR: 95.2% Puerto Ricans, 0.5% Cubans, 0.3% Mexican and 2.6% other Hispanic or Latino. Only 0.1% was classified as Asian, Native Hawaiian and other Pacific Islander.*

*It must be noted that Dominicans are the most visible ethnic minority group on the island but the most difficult to count because of the illegal status of many of them. Between 1966 and 2002, a total of 118,999 Dominicans were legally admitted as immigrants to Puerto Rico, according to data from the US Department of Justice. In 2000, the Dominicans constituted 56.1% of all foreign-born population residing in Puerto Rico (Duany, 2005).*

*According to preliminary Vital Statistics data of 2007 almost 90.4% births were among Hispanic/Latino women, the majority Puerto Ricans (86.8%). In addition, these statistics revealed the birth rate for teens 18 to 19 years of age to be 88.2 per 1,000, 15 to 17 years of age to be 36.4 per 1,000 and 1.1 per 1,000 for teens in the 10 to 14 age group. Women 35 years or older had a birth rate of 7/1,000.*

*The MCH Program, through PRAEP and SISA is working directly with adolescents with the objective of raising consciousness on the importance of primary prevention of pregnancy. In addition, the CHWs distribute material and offer group activities to adolescents across the Island about the importance of sexual abstinence, peer pressure among adolescents, interpersonal relations and family planning.//2010//*

**Health Status Indicators 08A:** *Deaths of infants and children aged 0 through 24 years enumerated by age subgroup and race. (Demographics)*

##### HSI #08A - Demographics (Total deaths)

<b>CATEGORY</b> Total deaths	<b>Total All Races</b>	<b>White</b>	<b>Black or African American</b>	<b>American Indian or Native Alaskan</b>	<b>Asian</b>	<b>Native Hawaiian or Other Pacific Islander</b>	<b>More than one race reported</b>	<b>Other and Unknown</b>
Infants 0 to 1	342	0	0	0	0	0	0	342
Children 1 through 4	34	0	0	0	0	0	0	34
Children 5 through 9	20	0	0	0	0	0	0	20
Children 10 through 14	31	0	0	0	0	0	0	31



Children 15 through 19	190	0	0	0	0	0	0	190
Children 20 through 24	320	0	0	0	0	0	0	320
Children 0 through 24	937	0	0	0	0	0	0	937

## Notes - 2010

### Narrative:

*//2010/ In 2007, the preliminary data on infant mortality rate was 8.3 per 1,000 live births which is lower than the reported on 2006 (final data), 9.1/1,000 live births. The Fetal and Infant Mortality Case Review Committee began reviewing IM cases in June 2009. This committee will attempt to identify potential non-medical contributing factors for these deaths such as economic, emotional, social, environmental and health care system related. Once they are identified the community action team will be in charge of developing the strategies to eliminate or ameliorate them.*

*Regarding the pediatric population, preliminary data for 2007 indicates that the death rate in the age group 1-14 was 14.2/100,000. The leading causes of death were: (1) unintentional injuries, (2) infectious diseases, and (3) diseases of the respiratory system. In the 5-9 year old age group, 27 deaths were reported. The leading causes of death were: (1) unintentional injuries, (2) diseases of the respiratory system, and (3) diseases of the circulatory system. A total of 49 deaths were reported in the 10-14 year old age group. The leading causes of death among them were: (1) unintentional injuries, (2) infectious diseases, and (3) diseases of the respiratory system. For the adolescent group aged 15-19, the death rate was 65.1/100,000. The leading causes of death were: (1) homicides, (2) unintentional injuries, and (3) diseases of the nervous system.*

*In terms of race, most deaths occurred in whites in all age groups: 1-14 age group (93.6%); 1-4 age group (97.1%); 5-9 age group (100.0%); 10-14 age group (87.8%); 15-19 age group (83.0%) and 20-24 age group (81.7%).*

*The death rate for the young adult population (20-24 years) was 130.8/100,000. The most frequent causes of death in this age group remain homicides, unintentional injuries, followed by suicides. //2010//*

**Health Status Indicators 08B:** Deaths of infants and children aged 0 through 24 years enumerated by age subgroup and Hispanic ethnicity. (Demographics)

HSI #08B - Demographics (Total deaths)

<b>CATEGORY</b> Total deaths	<b>Total NOT Hispanic or Latino</b>	<b>Total Hispanic or Latino</b>	<b>Ethnicity Not Reported</b>
Infants 0 to 1	0	342	0
Children 1 through 4	0	34	0
Children 5 through 9	0	20	0
Children 10 through 14	0	31	0
Children 15 through 19	0	190	0
Children 20 through 24	0	937	0

Children 0 through 24	0	1554	0
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#### Notes - 2010

##### Narrative:

*/2010/ In 2007, the preliminary data on infant mortality rate was 8.3 per 1,000 live births which is lower than the reported on 2006 (final data), 9.1/1,000 live births. The Fetal and Infant Mortality Review is now in the phase of evaluating the infant mortality cases through the Review Committee. This committee will identify additional contributing factors to infant mortality. The first meeting of this committee will be held on June 23, 2009.*

*Vital Statistic Data for 2007 reported 388 infant deaths. Among them, 336 (86.6%) were born to Puerto Rican women, 38 (9.8%) to women from US mainland, 6 (1.5%) from Dominican Republic and the rest from other nationalities.*

*The literature shows that the survival of VLBW and preterm births is higher in infants born in tertiary perinatal centers than infants born elsewhere. Currently, the MCH Program is analyzing data about the perinatal services offered in birthing facilities in Puerto Rico. Based on the Perinatal Guidelines adapted for Puerto Rico, these facilities will be classified as basic, specialized or sub-specialized. Upon hospital classification, a descriptive analysis will be repeated in order to identify newborns outcome depending on their place of birth. Once the study concludes, it is expected that birthing hospitals will be able to coordinate among themselves and establish a regional referral network based on their assigned level of care. This will allow them to provide services in the appropriate facilities to pregnant women, based on their risk level.*

*In terms of the pediatric population, preliminary data for 2007 indicates that the death rate in the age group 1-14 was 14.2/100,000. The leading causes of death were: (1) unintentional injuries, (2) infectious diseases, and (3) diseases of the respiratory system. In the 5-9 age range, 27 deaths were reported. The leading causes of death were: (1) unintentional injuries, (2) diseases of the respiratory system, and (3) diseases of the circulatory system. A total of 49 deaths were reported in the 10-14 age group. The leading causes of death among them were: (1) unintentional injuries, (2) infectious diseases, and (3) diseases of the respiratory system. For the adolescent group aged 15-19, the death rate was 65.1/100,000. The leading causes of death were: (1) homicides, (2) unintentional injuries, and (3) diseases of the nervous system.*

*The death rate for the young adult population (20-24 years) was 130.8/100,000. The most frequent causes of death in this age group remain homicides, unintentional injuries, and suicides. //2010//*

**Health Status Indicators 09A:** *Infants and children aged 0 through 19 years in miscellaneous situations or enrolled in various State programs enumerated by race. (Demographics)*

##### HSI #09A - Demographics (Miscellaneous Data)

<b>CATEGORY</b> Misc Data BY RACE	<b>Total All Races</b>	<b>White</b>	<b>Black or African American</b>	<b>American Indian or Native Alaskan</b>	<b>Asian</b>	<b>Native Hawaiian or Other Pacific Islander</b>	<b>More than one race reported</b>	<b>Other and Unknown</b>	<b>Specific Reporting Year</b>
All children 0 through 19	1104427	0	0	0	0	0	0	1104427	2008
Percent in	43.6	0.0	0.0	0.0	0.0	0.0	0.0	43.6	2007

household headed by single parent									
Percent in TANF (Grant) families	24.0	0.0	0.0	0.0	0.0	0.0	0.0	24.0	2008
Number enrolled in Medicaid	161246	0	0	0	0	0	0	161246	2008
Number enrolled in SCHIP	65161	0	0	0	0	0	0	65161	2008
Number living in foster home care	5660	0	0	0	0	0	0	5660	2008
Number enrolled in food stamp program	414227	0	0	0	0	0	0	414227	2008
Number enrolled in WIC	197169	0	0	0	0	0	0	197169	2007
Rate (per 100,000) of juvenile crime arrests	2082.2	0.0	0.0	0.0	0.0	0.0	0.0	2082.2	2008
Percentage of high school drop-outs (grade 9 through 12)	1.1	0.0	0.0	0.0	0.0	0.0	0.0	1.1	2008

#### Notes - 2010

Population estimates of the US Census.

2007 Puerto Rico Community Survey, US Census.

Data provided by the Puerto Rico Family Department.

Data provided by the Medical Assistance Program (Medicaid Program).

Data provided by the Medical Assistance Program (Medicaid Program).

Data provided by the Puerto Rico Family Department.

Data provided by the WIC Program of the Puerto Rico Department of Health.

Data provided by the Puerto Rico Police Department.

Data provided by the Puerto Rico Department of Education.

Data provided by the Puerto Rico Family Department.

#### Narrative:

***/2010/ The state of health of a population is affected by social, environmental, behavioral, as well as economic determinants. Adverse health outcomes disproportionately affect***

*infants and children in foster care or in single-parent homes.*

*As mentioned in the HSI 6A, according to the 2000 Census and 2007 PR Community Survey (PRCS) data, white race predominates in PR. However, we are certain that the information under race classification reported in the PRCS and the Census is biased for two main reasons. First, the question does not include other racial categories used by Puerto Ricans. Second, there is a social stigma attached to being black among Puerto Ricans. Nevertheless, there is not a significant disparity in race in the Island. For this reason, we will not make a distinction by race when describing the 0-19 years old population.*

*The US Census Bureau reported that PR had a total of 3,808,610 inhabitants in 2000. About 32% (1,219,804) were children and adolescents up to 19 years old. For 2007, the PRCS reported that about 28% infants and children (1,104,427) were living in the Island. This represents a 9% reduction in the population in this age category when compared to that of 2006.*

*In 2008, there was a slight increase of 4.8% of infants and children in households headed by single parents compared with 2007. On the contrary, families with children up to 19 years old in the TANF Program decreased about 11%. In 2007 the percent was 27.1%, while in 2008 it was 24%.*

*The Medicaid and SCHIP enrollments increased 33% in 2008 compared with 2007. The number of infants and children enrolled in the WIC Program also revealed an increase of 64%. The number enrolled in the food stamp program showed a significant increase of 20% between 2007 and 2008.*

*During their daily activities CHW, HVN and Perinatal Nurses in the eight Health Regions educate parents on the content of adequate pediatric care encouraging them to demand it for their children. Medicaid staff also promotes the same message when they participate in activities and health fairs. During these activities they attempt to identify people without health insurance, enroll them in the GIP and assist them in obtaining adequate care.*

*Educational or literacy levels are mentioned by World Health Organization (WHO) as one of the socioeconomic factors that can affect the health conditions of the population. In PR, the reported percentage of high school dropouts (grade 9 through 12) continues increasing (1.12% in 2008 vs. 1.0% in 2007). It is well known that leaving high school before graduation can lead to continued poverty and a higher incidence of juvenile arrests. The rate of juvenile crime arrests in 2008 was 2,082/100,000 inhabitants; about 382 arrests less than in 2007.*

*The Youth Health Promoters of the SISA Program developed activities through positive youth development initiatives to raise awareness among their school peers of health-related issues and the importance of completing an education.//2010//*

**Health Status Indicators 09B:** *Infants and children aged 0 through 19 years in miscellaneous situations or enrolled in various State programs enumerated by Hispanic ethnicity.  
(Demographics)*

HSI #09B - Demographics (Miscellaneous Data)

<b>CATEGORY</b>	<b>Total NOT Hispanic or Latino</b>	<b>Total Hispanic or Latino</b>	<b>Ethnicity Not Reported</b>	<b>Specific Reporting Year</b>
Miscellaneous Data BY HISPANIC ETHNICITY				
All children 0 through 19	0	1104427	0	2008

Percent in household headed by single parent	0.0	43.6	0.0	2007
Percent in TANF (Grant) families	0.0	24.0	0.0	2008
Number enrolled in Medicaid	0	161246	0	2008
Number enrolled in SCHIP	0	65161	0	2008
Number living in foster home care	0	5660	0	2008
Number enrolled in food stamp program	0	414227	0	2008
Number enrolled in WIC	0	197169	0	2007
Rate (per 100,000) of juvenile crime arrests	0.0	2082.2	0.0	2008
Percentage of high school drop-outs (grade 9 through 12)	0.0	1.1	0.0	2008

#### Notes - 2010

Population estimates of the US Census.

2007 Puerto Rico Community Survey, US Census.

Data provided by the Puerto Rico Family Department.

Data provided by the Medical Assistance Program (Medicaid Program).

Data provided by the Medical Assistance Program (Medicaid Program).

Data provided by the Puerto Rico Family Department.

Data provided by the WIC Program of the Puerto Rico Department of Health.

Data provided by the Puerto Rico Police Department.

Data provided by the Puerto Rico Department of Education.

Data provided by the Puerto Rico Family Department.

#### Narrative:

*/2010/ Since the major ethnic group in PR is Puerto Rican, followed by Dominicans and Cubans, all of them Hispanic (99%), the information presented in the HSI 9A is the same for this HSI. Please refer to the HSI 9A for the discussion of this health status indicator.//2010//*

**Health Status Indicators 10:** *Geographic living area for all children aged 0 through 19 years.*

HSI #10 - Demographics (Geographic Living Area)

Geographic Living Area	Total
Living in metropolitan areas	903032
Living in urban areas	1042579
Living in rural areas	61847
Living in frontier areas	0
<b>Total</b> - all children 0 through 19	1104426

#### Notes - 2010

An estimate for the population 0-19 years. 2007 PR Community Survey.

An estimate for the population 0-19 years. 2007 PR Community Survey.

An estimate for the population 0-19 years. 2007 PR Community Survey.

An estimate for the population 0-19 years. 2007 PR Community Survey.

**Narrative:**

*/2010/ According to the information provided by the 2000 US Census, the population density was estimated at an average of 1,080 persons per square mile. However, some metropolitan areas may have almost 10,000 persons per square mile. The PR population density increased 6.2% when compared to 2000, reaching an average of 1,147 persons per square mile in 2006. We estimate the percent of children up to 19 years living in metropolitan, urban and rural areas using the distribution for all individuals in Puerto Rico for 2008. Based on this estimate, about 903,032 infants, children and adolescents up to 19 years lived in metropolitan areas. This represents a slight reduction compared with the 2007 report. The same reduction is estimated for the population 0-19 years living in urban and rural areas. It is important to mention that the population in Puerto Rico is decreasing and the information for 2008 is an estimate.*

*Research conducted by the TV Monitoring and Evaluation Unit evidenced the health disparities between urban and rural areas. People living in rural areas have more adverse health outcomes. Aware of this barrier, the MCH Program provides educational services, coordinates health fairs and gives referrals to other programs in order to overcome the health problems of this population.//2010//*

**Health Status Indicators 11:** *Percent of the State population at various levels of the federal poverty level.*

**HSI #11 - Demographics (Poverty Levels)**

<b>Poverty Levels</b>	<b>Total</b>
Total Population	3954037.0
Percent Below: 50% of poverty	26.0
100% of poverty	45.5
200% of poverty	72.0

**Notes - 2010**

2008 Population Estimates, Census Bureau.

2007 PR Community Survey.

2007 PR Community Survey.

Data provided by 2007 PR Community Survey for percent of poverty. The 200% of poverty was determined by the 125% of poverty. 2008 Population Estimates (IDB).

**Narrative:**

*/2010/ According to the 2007 PR Community Survey (PRCS), there are 3,878,136 individuals in Puerto Rico for whom the poverty level was determined. Of this population,*

**26% are below 50% poverty level, 45.5% are 100% below poverty level and 54.1% below 125% poverty level. Currently, there is no data available about how many persons are below 200% poverty level.**

**In terms of gender, in 2005, about 47% of females were below poverty level, compared with 43% of males. For 2007, only the males had an increase of 1 percentage point (44%), whereas the women remained at the same level. This data evidences that there are more women than men living in poverty.**

**In 2005, 56% of children under 18 years old lived below the poverty level in PR. In 2007, this percent decreased (not statistically significant) to 55%.**

**The 2008 ESMIPR (PRAMS-like survey) results revealed that among mothers who reported their annual family income, 45.7% had an income less than \$10,000; 21% (\$10,000-\$19,999); 18.4% (\$20,000-\$39,999), and 15.0% reported an annual income higher than \$39,999. The average number of family members depending on that income was four. Slightly more than 4 in 10 surveyed mothers (42.0%) reported that they were employed outside the home. This data contrasts with 2004 ESMIPR results, which found that among mothers who reported their annual family income, about 44.2% had an income less than \$10,000; 24% (\$10,000-\$19,999); 18.5% (\$20,000-\$39,999), and only 13.5% reported an annual income higher than \$39,999. The average number of family members depending on that income was four. Fewer than 4 in 10 surveyed mothers (38.2%) reported that they were employed outside the home.**

**The data reveals that there was an increase, although not a significant one, for those mothers with an annual family income less than \$10,000 and those with incomes higher than \$39,999. On the other hand, fewer mothers had annual family incomes between \$10,000 and \$19,999.**

**Due to the economic recession, it is expected that the population below poverty level will increase during this current year (2009).**

**The MCH Program will be evaluating, through the needs assessment, the priority needs of this population. Currently, the MCH Program focuses on identifying both governmental and non-governmental agencies to coordinate services in order to bring the best services and contribute to a healthier quality of life.//2010//**

**Health Status Indicators 12: Percent of the State population aged 0 through 19 years at various levels of the federal poverty level.**

**HSI #12 - Demographics (Poverty Levels)**

<b>Poverty Levels</b>	<b>Total</b>
Children 0 through 19 years old	1104427.0
Percent Below: 50% of poverty	37.4
100% of poverty	55.3
200% of poverty	62.9

#### **Notes - 2010**

2008 Population Estimates (IDB).

Data provided by 2007 PR Community Survey.

Data provided by 2007 PR Community Survey.

Data provided by 2007 PR Community Survey for percent of poverty. The 200% of poverty was determined by the 125% of poverty.

**Narrative:**

*/2010/ According to the 2005 Puerto Rico Community Survey, 55% of children under 18 years old were below the poverty level. In 2007, this percent remained similar, 55.3%.*

*When we observed the families in PR, 41% of all families and 58% of families with a female householder and no husband present were below poverty level for both years 2005 and 2007. However, there is a significant increase when there are children in the family.*

*In 2005 and 2007, PRCS reported that 49% of all families and 68% of families headed by a female without a husband present and with children under 18 years old were below the poverty level.*

*Moreover, female-headed families without a husband present and with children were poorer than married-couple families. For 2005 and 2007, the married-couple families with children below poverty level were 35% compared with 68% families with a female householder and no husband present.*

*On the other hand, there were 966,505 children for whom poverty status was determined in 2007. Of this, 37% were children below 50% of poverty level, 55% were under 100% of poverty level and 63% were below 125%. This means that the number of poor children in Puerto Rico increases as the percent of poverty level increases.*

*Due to the economic recession, it is expected that the children below poverty level will increase for this current year (2009).*

*We clearly evidence the disparity in families with children under 18 years of age headed by a female and without a husband present. MCH Program is providing information and education through the HVP and CSW in every region for all those families, targeting particularly those with a female householder. In collaboration with "Nido Seguro", a Home Visiting Program of the Department of the Family, we are covering more geographical areas in an effort to impact more people in need.//2010//*

## **F. Other Program Activities**

### */2010/ Direct Services*

*The MCH Division provides contraceptive methods to women of reproductive age who hold the Government Insurance Plan. During FY 2007-2008, the division provided contraceptives to 19,306 WCBA (unduplicated); 48,639 methods were distributed. We also provide to participants of the Health Care Reform the prenatal Rhogam vaccine recommended at 28 weeks gestation for Rh negative non-sensitized pregnant women. A total of 1,572 Rhogam vaccines were served during this period.*

*The Pediatrics Centers served a total of 8,155 CSHCN.*

### **Enabling Services**

*The toll-free line of the PRDoH (1-800-981-5721) is required by law to provide information*



*regarding healthcare accessibility and other services to the population. The Office of Informatics and Technological Advances (OITA) of the DoH will be in charge of the Toll Free line services as Data Voice Solutions agreement was not renovated due to breach of contract. The HR Reform requires that PRHIA and all health insurance companies contracted operate a toll free line for their beneficiaries. To date, there are several toll-free lines for clients and service providers as well:*

**ASES: 1-800-981-2737**

**Triple C: 1-800-981-1352; 1-800-255-4375**

**MCS: 1-800-981-2554**

**Humana: 1-800-790-7305**

**Patient's Advocate Office: 1-800-981-0031**

*From Jan to Aug 2008, the PC's received 56 calls through the toll-free lines. The MCH data voice hotline reported 202 calls. APNI received 1,725 calls for orientation.*

*The Sexual Assault Victim Center (CAVV, Spanish acronym) reported that the MCH social worker received 124 information calls during this period.*

#### **Population Based**

*\*Regional MCH Staff provided 8,094 educational activities about MCH topics reaching 108,749 persons. Our staff took part in 9 radio or TV programs and wrote 5 articles in local newspapers covering diverse MCH themes. Regional personnel also participated in 455 health fairs and multiphase clinics that reached 34,523 participants.*

*\*During FY 2008-2009, the local Healthy Start Project Participants' Committee carried out 72 meetings with the participation of 637 persons. Likewise, the Healthy Start Consortium met 6 times.*

*\*At least 706 educational activities were reported by the Sexual Assault Victims Center (CAVV, Spanish acronym) where more than 17,617 persons participated island wide, including health professionals, public attorneys, students, parents and general public. Of these activities, 93 were training sessions on developing skills in intervention with survivors of sexual/ domestic aggression where 2,026 health professionals took part. The Center also participated in 21 radio and TV Programs. Two training sessions aimed at parents to develop skills for raising kids, this time for parents of sexually-abused children, were carried out. A total of ten families participated. This approach is subsidized by the MCH Division.*

*\*The PR EMSC Program carried out educational activities about toy safety promotion reaching 1,298 persons. They also held a symposium on pediatric care during a disaster where 175 health care professionals participated; 75 were certified in Pediatric Advanced Life Support and 56 in Advanced Trauma Life Support.*

*\*During FY 2007-2008, the Naranjito Adolescent Program continued promoting the PYD model in its community. For this purpose, a pilot training was held where 10 health professionals from the Department of Health participated. The project model was also presented to 12 agencies that work with adolescents and collaboration agreements between the Naranjito Program and the agencies were established.*

#### **Infrastructure Building**

*The MCH Division carries out annually an ongoing assessment, TA, data analysis, training events and other activities.*

*\*The Rotary Club continues sponsoring educational activities aimed at improving infant*

*health, particularly focusing on Infant Mortality.*

*\*The PR ECCS Project is currently focusing on the developing and integrating the mental health component in services directed at young children. Also, a working group was convened by the Governor's Office to give recommendations to the Governor on the establishment of a state Advisor Council to address early childhood issues and services.*

*\*The MCH staff participated with one presentation about the Evaluation of Oral Health of Third Grade Students in Public and Private Schools during the Annual PR Epidemiology Conference.*

*\*The MCH Division has provided written recommendations on public policies in 35 legislative bills and resolutions regarding maternal, child and adolescent health issues.*

*\*Our division submitted the document "Infant Feeding in Crisis or Emergency Situations", a guide to assure breastfeeding practice during disasters events, to be attached to the DoH Emergency Plan. The Division is waiting for its approval.*

*\*The DoH Breastfeeding Committee, coordinated by the MCH Division, participated in 6 USBC teleconferences with the purpose of providing state coalitions with new approaches to enhance breastfeeding practices in their communities.*

*\*The Autism public policy project law, developed by the Autism Interagency Committee, was approved by the Secretary of Health in March 2009, and is at present under evaluation by the Legislature.*

*\*The legislative bill meant to make amendments to the Bill of Rights for Persons with Disabilities has been approved. The Alliance for Full Participation, of which the CSHCN is a member, had submitted recommendations for this bill.*

*\*The MCH Division is actively participating in a Committee established to prepare the action plan to comply with the Law #79 of June 2008. This law requires placing a poster at all stores that sell alcoholic beverages with advice aimed at women of reproductive age to raise their awareness on the risks of having a baby with fetal alcohol syndrome if they consume alcohol while pregnant.*

*\*Collaborative efforts have been initiated between Birth Defects Registry and UNHSP to link their information. A report of the UNHSP results beginning in 1984 will be included for the first time in the 2008 Birth Defect Annual Report that will be published this summer.//2010//*

## **G. Technical Assistance**

The new Guidance set for the Title V Application and Annual Report requires that States report progress in achieving the established annual performance indicator for each of the 18 National Performance Measures, all the State Negotiated PMs (9 in PR), 11 HSCIs and other health status and sociodemographic indicators and 6 outcome measures. This is great challenge for those jurisdictions with limited resources and which at the same time are left out of national surveys that provide the data for some of the PMs. The latest example of a survey which did not consider the needs of the jurisdictions is the SLAITS. This survey will help the States by providing the data to monitor some of the PMs concerning the CSHCN population. However, the jurisdictions must report progress on performance measures #02, #03, #04, #05 and #6 even though they were not included in the SLAITS.

Currently, the PR CSHCN program does not have the needed data to monitor the progress of the

five national performance measures mentioned earlier. There are no data for either the denominator nor the numerator of these performance measures.

Since in 2005-2006 states and jurisdictions will have to perform the comprehensive and mandated 5 year needs assessment, a TA concerning the needs assessment of the population of CSHCN is desperately needed. Some of the questions that need to be answered for the CSHCN include:

1. How many children with special health care needs are there in the Island?
2. What is the distribution by age group?
3. What are the most prevalent conditions?
4. In which geographical areas do these children live?
5. What services are available for them and where?
6. How many providers are there according to identified prevalent conditions, and where do they practice across the Island?
7. Others.

Initial conversations with Dr. Michael Kogan have already taken place on Puerto Rico's need to collect pertinent data for CSHCN. The Division of Habilitative Services firmly believes it is necessary to request TA for this endeavor in order to be successful.

The TA should be geared to assist us in designing the most appropriate process to gather the needed information to answer the aforementioned questions, what are the minimal resources needed to carry out the task and to obtain reliable and useful data.

Therefore we request that our MCHB Project Officer come to PR, gain knowledge of our service delivery system and recommend the appropriate MCH staff person to assist us in the process of developing, adapting, testing and administering the Spanish SLAITS CSHCN survey to the general population.

Technical assistance also is being requested to assist the Title V CSHCN Program in the planning and development phases of a comprehensive strategic transition plan partnering with all stakeholders to comply with the NPM#6.

/2007/ The Habilitation Section, along with the staff of the MCH Division, will establish a collaborative effort to develop a questionnaire based on the CSHCN SLAITS Spanish version. Questions pertinent to NPM 2-6 will be evaluated for inclusion and others will be added to make it culturally and linguistically appropriate. In addition, PR has identified the need to collect data on the prevalence of CSHCN conditions island wide and by municipality, as well as the socio-demographic data for this population. This information will be collected using either the SLAITS or another instrument designed by the MCH Monitoring, Evaluation, Investigation Section established by Administrative Order No. 207.

The Title V Application and Annual Report requires that states report their progress towards achieving the established annual objectives for Health Status Indicators (HSI) and Health System Capacity Indicators (HSCI). One of the data sources used for this purpose is the Hospital Discharge Survey. It provides data for HSI 4A: the rate of non fatal injuries in children of 14 years of age and older; HSCI 01: the rate of hospitalizations among children 0-4 years due to bronchial asthma; and HSCI 9A: the ability of the MCH program to obtain data for program planning or policy purpose in a timely manner. The Hospital Discharge Survey is conducted annually by the National Center for Health Statistics, and collects medical and demographic information from a sample of discharge records selected from a sample of hospitals. The data collected serve as a basis for calculating statistics on hospital utilization related with preventable conditions such as those described above.

Reporting data on these indicators is a great challenge for territories and jurisdictions with limited

resources that do not participate in these national surveys. In order to obtain quality and timely data needed to report on these HIS and HSCI, the Puerto Rico Department of Health is requesting a technical assistance. It will allow us to initiate the planning phase for the PR Hospital Discharge Survey Project. During this phase we will adapt and customize the survey to our local needs and language specifications. Being able to have key personnel from the National Center for Health Statistics assist the MCH Division Monitoring and Evaluation Section during this phase will increase our ability to have data to monitor our progress toward improving the health and wellbeing of our target population. We intend to submit a formal request for this technical assistance and begin our planning phase during this current budget year.//2007//

/2008/ The Home Visiting Program is one of the core services offered by the Puerto Rico Title V Program. Its target population consists of pregnant women, women in the inter conceptional period up to 24 months after birth, and children up to 2 years of age with complex health and social problems. During calendar year 2005, 103 Home Visiting Nurses (HVNs) provided services in 74 out of 78 municipalities (95% coverage) and 81 Community Health Workers (CHWs) were assigned to 63 municipalities.

The HVNs and CHWs participated in various continuing education activities sponsored by the PR Health Start Project and the Title V Program to develop their professional capacity to deliver quality services to the population. According to Healthy Start guidelines, emphasis is given to increasing the use of preventive services, including early admission to prenatal care, regular pediatric and women's health visits to primary providers, and adequate immunizations; screening for behavioral risk factors and maternal depression and addressing women who are at risk or engaging in risk behaviors through educational interventions by the HVNs or referrals to treatment services available in the community, among others.

The main goal of the Home Visiting Program (HVP) is to improve birth outcomes by promoting the utilization of preventive services and prenatal care through education, counseling and case management in Puerto Rico.

The Home Visiting Program developed two quasi-experimental studies assessing the impact of the HVP on a group of pregnant HVP participants. One was conducted in 2001 comparing birth outcomes of HVP participants (n=1,052) with a no-intervention equivalent control group (n=1,052) matched by age, educational level and source of payment for health services. A similar evaluation was performed in 1999-2000 studying two groups of women (2,215 HVP participants and 2,215 controls) matched by age, marital status, educational level and income.

The findings of the study suggested that prenatal care and birth outcomes in participants and controls are similar, although participants begin their pregnancy with more risk factors than the controls. Based on that information, we can infer that the HVP is helping our participants to achieve a more reasonable prenatal care improving their chances for a better birth outcome.

The MCH Program wants to replicate the study to evaluate the impact and effectiveness of the HVP. Therefore, technical assistance is requested to assess the method of the evaluation plan and to give recommendations.

Historically, C/S rates in Puerto Rico have been higher than those in the mainland USA. A descriptive study was carried out to provide updated information to concerned individuals and organizations to generate discussion regarding the possible causes that lead to the increased use of this method in Puerto Rico.

Stratified analyses from linked birth and death files provided by the State Vital Statistics Office were performed using the most relevant data available to describe the picture and to generate hypotheses regarding the problem. This study has been used to raise general awareness of the problem among OB/GYN specialist and the Association of Hospitals to help them develop policy and practices aimed at reducing C/S in Puerto Rico.

A C/S Evaluation Committee was created with the objective of analyzing the findings of the study conducted by the MCH staff. The Committee generated a list of medical and non-medical reasons that may lead to a C/S. In order to prove or reject each of the above reasons, two other studies have been conducted. A chart audit of a representative sample of 560 cases of C/S in 1999 was performed in 2002. This study did not prove that the high rate of C/S could be explained by the existence of medical conditions; at least, the evidence was not found in the evaluation of the vital files nor hospital records.

The other study recommended by the C/S Committee was a survey of women subjected to C/S. From July 2004 to February 2005, the MCH staff conducted a study looking at primary data from the perspective of the mother that may help explain the high and increasing rates of C/S in Puerto Rico. The study looked for associations between attitudes and experiences of the woman and the characteristics of the physician in the decision making to deliver by C/S. The methodology consisted of a self-administered questionnaire that collected socio-demographic data, medical history, and prenatal care utilization, experiences before and during pregnancy, delivery information, newborn data, and the mother's opinion about the type of delivery. The magnitude and significance of the association (OR) between cesarean delivery and the influence of the woman and the characteristics of the physician was determined by a Multinomial Regression Model. After adjusting by confounding variables, the risk of having a cesarean delivery increases when the birth is attended by a male obstetrician (OR=2.02; p=0.04). Although there was no evidence of statistical significance (p>0.05), there was an excess risk of having a cesarean delivery if the pregnancy was unintended (OR=1.50), the mother had a negative experience during pregnancy (OR=1.77), or the mother had concerns during pregnancy (OR=1.55).

Still, in 2005 the C/S rate was 48.1%, almost two times the expected rate according to the Puerto Rico's Healthy People Objectives (26.5%). The MCH Program requires assistance to design a more profound study that will help identify the main factors for the increasing rates of C/S in Puerto Rico. Furthermore, the identification of new strategies for decreasing this birthing method is also needed. //2008//

/2009/ PR has the highest PTB in the nation. In 2007 the MCH Division joined the Puerto Rico Prematurity Taskforce (PRPT) with the purpose of identifying local risk factors that may be contributing to this elevated rate and to develop a feasible strategy that could lead to improve this health indicator. The PRPT closely analyzed VS data from 1990 to 2004 to identify risk factors that could explain the phenomenon. Unfortunately our results failed to directly point at any of the usual factors such as maternal age, education and lifestyle, prenatal care and method of birth as the explanation for it. We are currently in the process of conducting focus groups with mothers of premature infants in order to identify common factors that may shed additional light into the issue and help us direct and focus our future investigations.

Since premature and LBW births are the leading cause for IM in PR, determining preventable or modifiable risk factors for PTB is one of our biggest challenges and one of our greatest priorities. Due to the severity of the problem we would like to expedite if possible the identification of contributing factors. Therefore the MCH Division is requesting a TA to help us further evaluate this situation and identify those risk factors we can reduce or eliminate to the PTB rate in PR.//2009//

***/2010/ In 2009-2010, the states, territories and jurisdictions will have to carry out the comprehensive and required 5 years needs assessment. We consider vital a TA concerning the needs assessment of the population we serve to design the most appropriate process to gather the needed information and select priorities.//2010//***

## **V. Budget Narrative**

### **A. Expenditures**

#### **/2007/ Completion of Budget Forms**

Please refer to budget columns of Form 2, Form 3, Form 4 and Form 5 for FY 2004-2005.

Estimates had to be used in providing budget and expenditure details. Breakdown of expenditures by type of services is a very difficult task when we try to assess the performance of a public health professional. This task is quite easy at the first level of the pyramid related to direct services. At this level, we know who serves the different groups of the MCH population and the amount of time dedicated to each of the subgroups, allowing us to determine the expenditures by type of individuals served. But trying to estimate the amount of time dedicated to each of the subgroups comprising the MCH population, as well as the time dedicated to perform enabling, population-based or infrastructure building services, is not an easy task. For this reason, estimates had to be made and this may lead to discrepancies between the budgeted and the expended figures by levels of the pyramid. The expended columns reflect the real expenditures registered accordingly to the pyramids levels. Adjustments have been made progressively to the budgeted funds to reflect the behaviors of the accounts during the past years. //2007//

#### **/2008/ Completion of Budget Forms**

Please refer to budget columns of Forms 2, 3, 4 and 5 of FY 2005-2006.

Estimates were used in order to provide budget and expenditure details. Breakdown of expenditures by type of services is a very difficult task when we try to assess the performance of a public health professional. This task is quite easy at the first level of the pyramid related to direct services. At this level, we know who serves the different groups of the MCH population and the amount of time dedicated to each of the subgroups, allowing us to determine the expenditures by type of individuals served. But trying to estimate the amount of time dedicated to each of the subgroups comprising the MCH population, as well as the time dedicated to perform enabling, population-based or infrastructure building services, is not an easy task. For this reason, estimates had to be made and this may lead to discrepancies between the budgeted and the expended figures by levels of the pyramid. The expended columns reflect the real expenditures registered according to the pyramid levels. Adjustments have been made progressively to the budgeted funds to reflect the behavior of the expenses in the accounts of previous years. //2008//

#### **/2009/ Completion of Budget Forms**

Please refer to budget columns of Forms 2, 3, 4 and 5 of FY 2006-2007.

Estimates were used in order to provide budget and expenditure details. Breakdown of expenditures by type of services is a very difficult task when we try to assess the performance of a public health professional. This task is quite easy at the first level of the pyramid related to direct services. At this level, we know who serves the different groups of the MCH population and the amount of time dedicated to each of the subgroups, allowing us to determine the expenditures by type of individuals served. But trying to estimate the amount of time dedicated to each of the subgroups comprising the MCH population, as well as the time dedicated to perform enabling, population-based or infrastructure building services, is not an easy task. For this reason, estimates had to be made and this may lead to discrepancies between the budgeted and the expended figures by levels of the pyramid. The expended columns reflect the real expenditures registered according to the pyramid levels. Adjustments have been made progressively to the budgeted funds to reflect the behavior of the expenses in the accounts of previous years.//2009//

#### **/2010/ Completion of Budget Forms**

***Please refer to budget columns of Forms 2, 3, 4 and 5 of FY 2007-2008.***

***Estimates were used in order to provide budget and expenditure details. Breakdown of expenditures by type of services is a very difficult task when we try to assess the***

*performance of a public health professional. This task is quite easy at the first level of the pyramid related to direct services. At this level, we know who serves the different groups of the MCH population and the amount of time dedicated to each of the subgroups, allowing us to determine the expenditures by type of individuals served. But trying to estimate the amount of time dedicated to each of the subgroups comprising the MCH population, as well as the time dedicated to perform enabling, population-based or infrastructure building services, is not an easy task. For this reason, estimates had to be made and this may lead to discrepancies between the budgeted and the expended figures by levels of the pyramid. The expended columns reflect the real expenditures registered according to the pyramid levels. Adjustments have been made progressively to the budgeted funds to reflect the behavior of the expenses in the accounts of previous years./2010//*

## **B. Budget**

*/2010/ Program allocations have taken into account the 30-30-30-10 requirements established by Title V. Efforts are made to match funds according to the identified needs through the four levels of the MCH pyramid, as well as the three groups of individuals that comprise the target population.*

*Puerto Rico assures that the MCH funds are used for the purposes outlined in the Title V, Section 505 of the Social Security Act. Traditionally, a fair method has been used to allocate Title V funds among individuals and geographic areas having unmet needs. The fair allocation of funds is guided by an Integrated Index of Maternal and Infant Health Status (IIMIHS) developed by the MCH Division to assess the health needs of the target population by municipality (Table II-1). One of the benefits of using this Index is that the information necessary to evaluate each of its variables is available on an ongoing basis through analysis of birth and death files. The Division of CSHCN allocates Title V funds guided by the needs assessment's findings and the national and state performance measures.*

*A total of 35% of Title V Block Grant Funds is allocated for the CSHCN program. Fifty-nine percent (59%) of funds are allocated in the Direct Service Pyramid Level. This includes salaries and benefits of the staff, specialists and sub specialists professionals' service contracts, special formulas, devices and Central level MCH Staff. The other five percent (5%) is used to cover the administrative costs for the central level and the seven Pediatric Centers.*

*As of December 2008, the MCH Division has 88 Home Visiting Nurses, 63 Community Health Workers, nine Perinatal Nurses and four Health Educators across the Island. At the regional level we have eight teams. Most teams are comprised of the regional MCH director, coordinator of maternal and infant health services, coordinator of preventive services for children, coordinator of adolescent health services, and administrative support staff. At the central level we have 26 regular positions and 6 contracts. Contract positions paid with Title V funds include a Biostatistician, one Epidemiologist, one Evaluator, one Anthropologist, one Physician and one Genetic Counselor.*

*At Central level, the CSHCN Section has a total of 19 positions: 16 regular positions and 3 contracts. Contract positions include an Evaluator, an Information System Administrator and an Epidemiologist. At Regional Level, the CSHCN Section has a total of 165 positions: 120 regular positions and 45 contracts. In total, 182 positions are paid with Title V funds.*

*Allocations by Levels of the Pyramid:*

*Direct Services: Previously, the MCH funds were assigned to the purchase of*

*contraceptive methods to support the family planning services rendered through the health care reform for women holding the GIP. This service provided by MCH has been affected by the reduction of funds, the increase in costs of contraceptive methods, and the legislated salary raise for nurses and the PRDoH Personnel Reclassification Plan implemented in July 2007. Even though family planning services, including sterilization of males and females, are included in the GIP, contraceptive methods are not included in the benefit package.*

*The needs of CSHCN identified through the needs assessment support our efforts to make specialized services available through the Pediatric Centers. The Metropolitan Area Pediatric Center, administratively under the Pediatric University Hospital for the past ten years, remains a supra tertiary referral center and provides services not available at the regions for children and families referred by the other six Pediatric Centers. The Metropolitan Area Center offers a wide variety of sub-specialized services to our population. This includes the salaries of the seven Pediatric Centers including medical specialists, sub specialists and allied health professionals, as well as special formulas for CSHCN over 5 years of age with metabolic disorders. Prosthetic and orthotic devices are partially funded according to payment capacity as determined by the Medical Assistance Office.*

*Enabling Services: A significant amount of Title V funds from this level is needed to support salaries, local travel and uniforms expenses for the 88 Home Visiting Nurses and 9 perinatal nurses. The HVNs are specially trained public health nurses who provide health education and coordinate services through referrals to the appropriate private and public entities in their communities. At this pyramid level funds are allotted to cover expenses for the Toll-Free Information Line to disseminate the services provided by CSHCN and MCH, and for an additional information line about services available at the Pediatric Centers. Also, part of these funds is set aside to support a community based organization that promotes adolescent health.*

*Eight (8) registered nurses and one (1) social worker provide care coordination services to CSHCN at the Pediatric Centers. Four (4) of these are paid with Title V funds and are included in this level; the other five (5) are paid with state funds.*

*Population-Based Services: Title V funds are used to maintain the NTD prevention campaign, folic acid consumption campaign, injury prevention, and the salaries and local travel expenses of the health educators. These funds are also used to purchase educational materials according to the performance measures and incentives that promote the toll-free line and convey a wide array of health promotion messages. The salaries for the staff of the Comprehensive Adolescent Health Program (SISA), including a physician and the social workers are assigned to this pyramid level. The 63 Community Health Workers in the eight regions as well as their local travel expenses are allocated at this level. The Community Health Workers have the responsibility to identify pregnant women and children outside the health care system and facilitate their enrollment in the GIP, as well as providing educational activities at the community level.*

*Infrastructure Building Services: To sustain the infrastructure of MCH/CSHCN programs, funds are used for the salaries of central and regional administrative staff. This area developed in the MCH Division is comprised by a team of skilled public health professionals including a Biostatistician, Epidemiologists, and Evaluators, among others. Funds are also invested for the needs assessment and other core functions, equipment, professional development, the purchase of computers, e-mail and informatics system maintenance, support for applied research and surveillance. All travel expenses required to attend meetings, conferences and trainings in the mainland, and other related activities are paid with these funds.*



**State dollars used to provide services to the MCH population surpasses many times the requirements for the match. State funds appropriations are used for the GIP and the implementation of a broad array of programs and services that contribute to improve the health and well being of the MCH population. Table V-1 presents a list of several programs supported by State dollars.**

**In addition to MCH dollars and the State funds listed in Table V-1, there are other federal sources of funds that contribute to the achievement of the MCH outcomes. These are included in Form #2.**

**Budget documentation: The Fiscal Affairs Office of the Department of Health and the Office of Federal Affairs maintain budget documentation for Title V funding and expenditures consistent with Section 505(a)(1).**

**Allocations for FY 2009-2010: The estimated amount of money to run the MCH/CSHCN programs during FY 2009-2010 is as follows:**

**Federal: \$16,052,712.00**

**Unobligated: \$3,512,301.00  
(FY 2008-2009)**

**State Matching: \$14,673,760.00**

**Program Income: \$233,179.00**

**Total : \$34,471,952.00**

**The unobligated balance allows us to continue running both MCH/CSHCN programs during the first trimester of FY 2009-2010, since the funds herein requested are not available until late November or early December of the fiscal year.**

**Allocation by MCH Population Groups:**

**A) \$4,815,813 (30%): for the provision of services to pregnant women, mothers and infants.**

**B) \$4,815,813 (30%): for the provision of preventive services for children.**

**C) \$4,815,813 (30%): for the provision of services to CSHCN.**

**D) \$1,605,271 (10%): From this amount, 5% is for program administration of Components A and B; and 5% for administration of the CSHCN program.**

**Administration: Up to 10% of the federal allocation is used to support salaries and benefits of administrative staff, internal audits, newspaper advertisements, office supplies, document reproduction, mailing, AMCHP annual membership and others. The CSHCN Program covers part of its administrative costs from the 35% allocated from the MCH Block Grant.**

**Other Requirements**

**Maintenance of Efforts: Puerto Rico is in compliance with maintenance of effort requirements as described in Section 505(a)(4). In fact, PR exceeded efforts of the 1989 program year. As of December 2008, ASES reported that 1,412,195 individuals of all ages and both sexes were covered by the GIP in Puerto Rico. Among these, 363,643 were women 15-49 years of age, 25,195 were infants <1 years of age, and 396,961 were children 1-19 years old, including CSHCN.**

**During the FY 2007-2008, of all individuals holding the GIP, the MCH population represented 55.64%. The annual cost per person was \$1,059.24 (\$88.27 per month). Table V-2 summarizes the funding sources provided by the State to pay for the health services of the population holding the GIP.**

**Considering that 55.64% (785,799) of the beneficiaries of the GIP represent the MCH population, it is estimated that PR invested over \$832,349,733 in state and local funds to**

*pay for the MCH services. We assume that 33%, or \$274,675,412.00, were invested in preventive and primary services for the MCH population. In addition, about \$216,164,839 of Medicaid and \$88,182,920 of SCHIP were also used for this segment of the population. Several earmarked state funds allocated for special services and programs were also identified. These include \$1,579,169 for the Pediatric AIDS program, \$198,000 for the Newborn Screening for Hereditary Diseases Program, \$100,000 for the EMSC program, and \$8,059,181 to support 105 children and adolescents with Catastrophic Illnesses, totaling \$9,936,350.00. Definitely, the Commonwealth of Puerto Rico surpasses the matching requirements of Title V. (Table V-1).//2010//*

*An attachment is included in this section.*

## **VI. Reporting Forms-General Information**

Please refer to Forms 2-21, completed by the state as part of its online application.

## **VII. Performance and Outcome Measure Detail Sheets**

For the National Performance Measures, detail sheets are provided as a part of the Guidance. States create one detail sheet for each state performance measure; to view these detail sheets please refer to Form 16 in the Forms section of the online application.

## **VIII. Glossary**

A standard glossary is provided as a part of the Guidance; if the state has also provided a state-specific glossary, it will appear as an attachment to this section.

## **IX. Technical Note**

Please refer to Section IX of the Guidance.

## **X. Appendices and State Supporting documents**

### **A. Needs Assessment**

Please refer to Section II attachments, if provided.

### **B. All Reporting Forms**

Please refer to Forms 2-21 completed as part of the online application.

### **C. Organizational Charts and All Other State Supporting Documents**

Please refer to Section III, C "Organizational Structure".

### **D. Annual Report Data**

This requirement is fulfilled by the completion of the online narrative and forms; please refer to those sections.